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ABSTRACT

The document reports an audit review made of educational activities within the Bureau of Indian Affairs (BIA) area offices in Anadarko and Muskogee, Oklahoma; Gallup, New Mexico; Juneau, Alaska; and Phonenix, Arizona. The field work, completed in 1967, was designed to (1) compile financial information to correlate with measures of output, (2) identify and determine reasons for differences in unit costs between geographical areas and accounting periods, (3) assess reliability of the BIA's financial records, and (4) appraise the effectiveness of the BIA's financial information in meeting management needs. Available information used included the fiscal years 1960 through 1965. The review principally focused upon effectiveness of the financial information system, feeding costs, guidance and dormitory operation costs, school bus and biannual transportation costs, plant operations and maintenance costs, and laundry expenses incurred by BIA schools. Also reviewed were assistance to Indian pupils in non-Federal schools; school management, instruction, and program direction; and summer programs and adult education programs. Recommendations for improvement in financial management by the BIA are included in the report, as well as 22 trend charts and schedules with narrative designed to focus on principal results of the review. (EL)

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# UNITED STATES
# DEPARTMENT OF THE INTERIOR

## Office of Survey and Review

## Audit Operations

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REVIEW OF EDUCATIONAL ACTIVITIES

BUREAU OF INDIAN AFFAIRS

PART I

JANUARY 1968

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## INTRODUCTION AND SUMMARY

At the request of the Assistant Secretary--Public Land Management, Audit Operations has made a review of educational activities within the Bureau of Indian Affairs. The audit was oriented to respond to the points raised by the Assistant Secretary and to those additional items which we felt warranted consideration. In more specific terms the purposes of the review were to:

1. Compile financial information and to relate this information to available measures of output.

2. Identify significant fluctuations or differences in "unit costs" between geographical areas and between accounting periods; and, where possible, to determine the reasons for the fluctuations and differences.

3. Assess the reliability of the Bureau's financial records from the standpoint of their accuracy.

4. Appraise the effectiveness of the Bureau's financial information in meeting management's needs, i.e., providing a basis for evaluating the effectiveness of operations and providing useful information for the decision making process.

The field work was accomplished during the period from April 1967 through September 1967 at the Anadarko, Gallup, Juneau, Muskogee, and Phoenix Areas. We worked with information applicable to fiscal

years 1960 through 1965. Although it would have been desirable to include fiscal years 1966 and 1967 in the review, the necessary information was not available due to the centralization of accounting functions and the initial problems encountered in implementing the new computerized system.

The detailed results of the review pertaining to financial information, unit cost data and other statistical relationships are set forth in Part II of this report. The information is shown through 17 series of exhibits. Appendix 2 to this part of the report is an index of the exhibits contained in Part II.

This part of the report contains 22 trend charts and schedules which together with narrative comments, are designed to focus on the principal results of our review. In addition, a separate section of this part of the report, beginning on page 7 sets forth our evaluations of the Bureau's financial information system together with related recommendations.

Except for the area of the financial information system, we have limited this report to presentation of the facts and have made no recommendations. However, numerous conclusions and inferences are obvious from these facts. Very briefly summarized, some of these are:

1. For fiscal years 1960 through 1965, the wholesale price of food has been relatively stable and at boarding schools the approach to menu planning is reasonably consistent. (Page 17)

2. At day schools, feeding policies vary materially in the number and types of meals served. (Page 19)

3. Material differences exist in per meal cost applicable to personal services. Larger schools tend to be more efficient. (Page 20)

4. On a per meal basis, feeding at day schools is less efficient than feeding at boarding schools. (Page 22)

5. There are material differences between areas in guidance and dormitory costs which correlate very closely to the employee-student ratio. (Page 35)

6. Due to a shortage of facilities in some sections of Alaska about $464,000 per year was spent to transport approximately 1,600 students to and from schools in other locations. (Page 42)

7. Repair and maintenance costs are not charged to educational activities which resulted in a $6 million exclusion for 1965 in the five area offices we reviewed. (Page 9)

8. Payments to states and other jurisdictions under the Johnson-O'Malley Act contracts run from $40 to $564 per capita, reflecting varying financial requirements of the participating states and jurisdictions. (Page 54)

9. Employee-student ratios for management of educational activities vary a great deal. There are also variances in the teacher-student ratio but to a lesser degree. (Page 68)

10. The amount of money spent on summer programs varies radically from one fiscal year to another because the financing is based on the money left over after the regular education program has been accomplished. (Page 76)

We did not, as part of this review, pursue in depth any operational or policy considerations from the standpoint of determining if (1) the differences between areas represent deliberate Bureau level decisions as compared to the results of decision making left to the discretion of individual area directors, (2) practical alternative approaches are available which are more economical and/or effective, or (3) cost differentials between areas are indicative of relative efficiency as compared to unavoidable differences in circumstances and conditions. In our opinion, however, sufficient evidence exists to indicate that Bureau level policy, in many situations, is less influential than the judgments made at the area office level, that available alternatives have not been studied to the extent they could be, and that the

relative efficiency of the various area offices has not been evaluated. It is suggested that the observations and conclusions in this report can be pursued by the Bureau in more depth.

As previously stated, we have made several recommendations relative to the effectiveness of the Bureau's financial information system. By the term "financial information system" we are referring to the sum total of (1) the classification and accuracy of cost information, (2) the efficacy of statistical measures of output, (3) the methods used to relate cost and output information, (4) the system of accumulating, aggregating, and reporting the information to serve the various organizational levels within the Bureau, and (5) the effectiveness of the system in making evaluations and providing reliable input into the decision making process.

The principal thing wrong with the Bureau's financial information system is that very little use is made of it. The emphasis on managing "funds" has served to distract interest from costs, output, and comparative analysis. Although there is no shortage of financial and statistical information, there is no orderly system for accumulating, relating, and reporting the information. We found numerous errors and inconsistencies in the system. But if the information had been used, it is improbable in our opinion, that the errors would have remained undetected and that the inconsistencies would have been allowed to continue.

The basic structure of the Bureau's cost accounting system is sound and, in most cases, statistical information is accumulated which provides a basis for measuring unit costs or making other pertinent relationships. But before any output can be usable, the quality of the product, in terms of accounting error, needs to be improved and inconsistencies between area offices need to be eliminated. More important, however, costs and output must be related and an orderly systematic method of reporting information to the various organizational levels must be implemented. Quite logically, the type of data and degree of detail will vary depending on the organizational level and responsibilities of the recipient.

Our specific recommendations for improving the financial information system begin on page 13. It should be noted that our review concerned a decentralized manual system which has now been converted to a centralized computer system. These particular recommendations are just as applicable to the present arrangement as they were under the previous one.

## FINDINGS AND RECOMMENDATIONS

### EFFECTIVENESS OF FINANCIAL INFORMATION SYSTEM

As far as it goes, the financial information system is intelligently constructed and the capability exists to make meaningful comparisons and evaluations and to provide substantive information input for decision making. Unfortunately, the basic data are not correlated or made available in a logical or orderly manner. Consequently, very little use is made of the system's capability.

The specifics of what we think is wrong with the present arrangements are summarized below:

1. Financial information is not related to available output measures, i.e., meals served, average daily attendance, square feet maintained, teacher-student load, etc.

2. In several cases, the accounting entity, or responsibility center has not been logically defined and there has been a general pattern of inconsistency. To illustrate, in Muskogee all day schools were merged into one accounting entity; in the Gallup Area, specialized schools were individual accounting entities, but all day schools within a subagency were grouped together as were all boarding schools. In Phoenix, each boarding school was a separate accounting entity, but day schools were grouped by geographical area. In

Muskogee each dormitory is a separate accounting entity but in Gallup, they are grouped by subagency.

3. Fund control is overemphasized. In all cases, obligational authority was distributed below the area office level. In our opinion this has created an environment where the principal focus is on "funds" instead of costs and related measures of output.

4. Accounting inconsistencies between areas detracted from the validity of the financial information for comparative purposes. To illustrate:

a. Phoenix did not cost surplus food; all other areas did.

b. Reimbursements received from the Department of Agriculture for milk were credited in total to boarding schools in Gallup and Phoenix. In other areas where reimbursements were received, the credit was identified to the individual accounting entity level.

c. In the Gallup Area, freight on food was separately identified. In other areas, all freight costs were charged to one account with no attempt made to distribute the costs to benefiting programs. This distortion is only significant for the Juneau Area.

d. Distribution of plant operations costs to benefiting programs was handled as follows:

(1) In Muskogee and Anadarko on the same percentage basis as shown in the budget estimates.

(2) In Juneau on a direct charge basis with some minor exceptions for consolidated utilities.

(3) In Phoenix on a predetermined percentage which is determined on the basis of both square footage data and budget estimates.

(4) In Gallup on a predetermined percentage which is determined on the basis of both footage data and utilities used.

5. There is no systematic reporting system to serve the various management levels. The only recurring financial report is a monthly operating statement by accounting entity which consists of costs incurred by account and subaccount. This report contains no output measures; no attempt is made to provide consolidated information to serve intermediate and top level management; and there is no orderly effort made at making comparative analyses between like activities at different locations. Statistical information on output measures is compiled once a year and published about 3 months after the end of the school year. The report contains no financial information.

6. Repair and maintenance costs are not identified to the educational program because they are not financed from the same appropriation which covers other educational costs. We estimated that in fiscal year 1965 about $6 million of repair and maintenance costs were allocable to education in the five areas included in our review. In our opinion, this is a material item of cost which has

been omitted and the resulting understatement of education costs has been significant. The fact that these costs are financed from a different appropriation should have no bearing on their treatment for cost accounting purposes.

7. Accounting errors are of sufficient frequency and magnitude to impair the reliability of the information. In some cases, the errors were so gross and obvious that we concluded the financial information was not being looked at, e.g., a $600,000 misclassification of costs in the Gallup Area between "School Management" and "Guidance and Dormitory" costs in fiscal year 1965.

Despite the general inadequacies of the present arrangements, we concluded that the method of classifying costs, i.e., the chart of accounts, is basically intelligent and responsive to the functional and organizational requirements. Furthermore, statistical data are generally available to provide meaningful measures of output. And after correcting the more significant errors and adjusting for the more important accounting inconsistencies we were in most cases able to make comparative analyses of like activities at different locations. The analyses made are detailed in other sections of this report.

As mentioned before, we think that the current cost classifications are basically sound. However, there are several changes which we think would improve the cost classification and we are presenting

our recommendations in the form of a suggested revised chart of accounts (see appendix 1). The following statements explain the differences between the current chart of accounts and our suggested revision:

1. Program Direction has been made a part of the regular operating cost and not a part of special services.

2. Cost of the Government's share of insurance, and retirement is to be added to the cost of personal services and not recorded as a separate function. Control will be maintained through the liability accounts.

3. Subaccounts have been provided under Assistance to Pupils in Non-Federal Schools to record data in the form in which the data are most often requested and to eliminate some manual records now being maintained in the area offices.

4. Subaccounts have been provided to record the cost of freight to the benefited subactivity. The failure to provide for the distribution of the cost of freight to benefited activities results in a distortion of costs and does not provide a basis for control and evaluation.

5. Additional subaccounts have been added under the Feeding subactivity to account for the various methods by which food is procured and to provide for appropriate reductions in the cost of feeding.

6. Subaccounts have been provided to record the cost of non-capitalized furniture and equipment to prevent distortion of per capita costs.

7. Costs to provide guidance and to operate dormitories have been separated as the two subactivities are not compatible.

8. Cost of operating, maintaining, and repairing buildings and structures has been provided for as a subactivity. An appropriate share of such costs should be recorded as a cost of education regardless of the source of funds.

9. Transportation of students has been established as a subactivity to provide management with needed data to make comparisons and evaluations.

Our review was based on the information and system in effect through fiscal year 1965. Since that time, of course, some major changes have been made--the principal one being the centralization of all the Bureau's accounting functions and their conversion to a computerized system. Although the problems discussed are based on a review of a system which has been materially modified in technique, our limited observations of current practices indicate that these problems still need to be resolved. The basic system in terms of cost classifications and reporting remains unchanged in concept. Consequently, the same shortcomings currently exist with respect to

emphasis on funds instead of costs, the absence of meaningful measures of output correlated with financial data, accounting inconsistencies between areas, etc.

With respect to the accuracy of source data, our observations indicate that it has deteriorated. Even under a centralized computerized system, the initial analysis and coding of financial transactions must be performed in the field. Unlike a manual system, once a transaction has entered a computerized system incorrectly the chances that the error will be detected soon enough to make a correction without considerable effort are greatly reduced. This is caused by lack of visible audit trail and the multiple uses made from the same input transaction. Therefore, we believe that the need for quality controls is greater under a computerized system than the need for such controls would be under a manual system.

Recommendations:

In addition to the suggested changes in the chart of accounts, as set forth in exhibit 1, we are making the following recommendations:

1. Financial information should be related to output measures. We have in mind an arrangement whereby statistical data, e.g., meals served and average daily attendance, are systematically accumulated and included in the financial reporting system.

2. The accounting entity or responsibility center should be established as the individual school or dormitory. This is

the logical level of principal operating responsibility where financial measures are pertinent. (There may be a few cases where individual schools are too small to be considered as a responsibility center but this situation can be accommodated on an exception basis.)

3. Fund control should not be extended below the level of the area office. Operating personnel at the responsibility center level should rely on the "cost accounting" system.

4. Accounting inconsistencies between areas should be eliminated. This can be automatically taken care of with the current development of a new system. We think surplus food should be costed and reimbursements for milk should be identified by accounting entity, i.e., school. With respect to freight, it should be identified to food costs and other benefited subactivities. A single system for distributing plant operations costs should be prescribed. Several acceptable methods are available.

5. The varying requirements of the different organizational levels should be recognized and accommodated in the financial reporting system. These principal levels are the responsibility center or individual school, intermediate management levels within an area, the area office, and the various functional and financial managers at the headquarters level of the Bureau. Requirements for recurring reports versus "as needed" reporting capability should be most carefully distinguished.

6. Repair and maintenance costs should be allocated to the educational program. This can be accomplished by pricing individual work orders or by prorating costs on the basis of square feet occupied or some other formula basis.

7. Quality control over input for the computerized system should be improved. One approach which we believe has merit is to assign a small staff of highly trained accounting personnel to each area office. The prime responsibilities of the staff would be (a) training field personnel to properly prepare documents that are to be processed by use of the computer, (b) explaining, and supplementing if necessary, manualized releases on accounting procedures, (c) making test checks to insure accuracy of input transactions, and (d) preparing special financial analyses from computer output as required for or by the area office.

## FEEDING COSTS

In fiscal year 1965 the five area offices reviewed spent $9.4 million on feeding. Costs incurred by area office were:

| | (In Thousands) |
|---|---|
| Anadarko | $ 649 |
| Gallup | 6,310 |
| Juneau | 1,002 |
| Muskogee | 344 |
| Phoenix | 1,065 |
| | $9,370 |

Boarding school students receive three meals a day 7 days a week which averages to 810 meals per year per student. Day school students receive only one meal per day 5 days a week or an average of 180 meals per year. Students living in dormitories and attending public schools receive two meals a day 5 days a week, and three meals a day on week-ends and holidays which averages to 618 meals a year.

The more significant conclusions we drew from the comparisons are summarized below and discussed in more detail in the paragraphs which follow:

1. At boarding schools, for fiscal years 1960 through 1965, the per meal costs of the food itself have been relatively stable from one fiscal year to another and relatively consistent between areas. We concluded that (a) the wholesale price of food has not changed much, and (b) there is a consistent approach to menu planning.

2. At day schools, the costs of food vary materially between areas. This reflects basic differences in feeding policies for day school students.

3. Costs of personal services, whether figured on an annual per capita basis or a cost per meal basis, vary materially between areas and in some cases between schools. There is a definite correlation between the number of students being fed and the personal services costs with unit costs decreasing as the number of students increase.

4. When computed on per meal basis, feeding at day schools is substantially less efficient than feeding at boarding schools because the personal services costs go up substantially. Although it appears that this situation is unavoidable, the extent of the differences should be measured and considered in evaluating the economic relationship between the two types of schools.

5. After adjusting for accounting errors and inconsistencies, there were relatively few significant variations between fiscal years in the same area. In most cases, the variations were explainable but in a few cases the age of the transactions and the extent of accounting errors and/or inconsistencies precluded us from reaching a definite conclusion.

Cost of Food at Boarding Schools

The per meal cost of food at boarding schools is consistent both between areas and fiscal years as demonstrated by the following data:

| Year | Anadarko | Gallup | Juneau | Muskogee | Phoenix |
|---|---|---|---|---|---|
| 1960 | $.1978 | $.2297 | $ N/A | $.2122 | $.2096 |
| 1961 | .2087 | .2366 | N/A | .2285 | .2171 |
| 1962 | .2174 | .2286 | N/A | .2125 | .2125 |
| 1963 | .2131 | .2414 | .3093 | .2239 | .2152 |
| 1964 | .2118 | .2347 | .2696 | .2442 | .2131 |
| 1965 | .2136 | .2244 | .2539 | .2111 | .2175 |

For fiscal years 1960 through 1963, feeding at Juneau was accomplished in part on a contract basis and accordingly, the cost of food could not be isolated. The higher cost at Juneau in 1963 is attributed to initial stockpiling. The significant drop in costs at Muskogee between fiscal years 1964 and 1965 is the result of an accounting treatment in erroneously classifying costs as day schools instead of boarding schools. Although we made an adjustment on the basis of the best information available, an accurate adjustment was not possible.

The above data substantiates the fact that wholesale food prices changed little in the period reviewed and it further indicates that feeding practices, in terms of types of meals, are relatively consistent between areas. The only significant operational difference noted is that procurement is centralized at the area office level in Juneau and Gallup but is decentralized in the other areas.

The per meal costs for food shown above do not include freight which is significant for only Gallup and Juneau. In FY 1965 the per meal freight costs were $.0379 and .0427, respectively. Freight is significant in Gallup because that area operates a central warehouse

and the freight is applicable to distribution from the warehouse to the school site. In Juneau, most purchases are f.o.b. Seattle which means that additional freight is incurred in getting food to Alaska.

The operation of a central warehouse in Gallup and the related additional distribution costs are practically unavoidable due to the large area serviced and the wide dispersal of individual schools. However, during our review of the Gallup Area, it was brought to our attention that a study had been made of the cost of distributing food from the Gallup Supply Center to the schools. It was reasonably determined that if the Bureau would make the distribution with their own personnel and GSA equipment, rather than using common carriers, a savings of $60,000 to $90,000 a year could be achieved. There was no evidence available to indicate what action had been taken on the study.

As an additional operational consideration, we noted that the Gallup Area emergency food supply, to be used during emergencies during the previous winter season, was still on hand at May 31, 1967. Arrangements were made to transfer the food to a summer program at another site. There are no formal instructions to handle this situation.

Costs of Food at Day Schools

The following information shows that the per meal food costs at day schools vary significantly.

| | FY 1965 Per Meal Food Costs |
|---|---|
| Gallup - UPA | .1214 |
| Juneau | .2803 |
| Phoenix | .3290 |
| Gallup-Navajo | .4987 |
| Muskogee | .5436 |

The above fluctuations reflect basic policy differences on feeding day school students. Students in Muskogee and Navajo students in Gallup receive a regular hot lunch plus a morning and afternoon snack. In Phoenix and Juneau students receive the hot lunch only and United Pueblo Agency students in Gallup receive only a supplement to their lunches.

Costs of Personal Services at Boarding Schools

A summary of the cost per meal for personal services follows:

| Year | Anadarko | Gallup | Juneau | Muskogee | Phoenix |
|---|---|---|---|---|---|
| 1960 | $.0455 | $.1337 | $ N/A | $.0850 | $.0565 |
| 1961 | .0523 | .1327 | N/A | .0886 | .0552 |
| 1962 | .0579 | .1315 | N/A | .0975 | .0607 |
| 1963 | .0655 | .1386 | .1625 | .1305 | .0682 |
| 1964 | .0721 | .1522 | .1611 | .1376 | .0678 |
| 1965 | .0728 | .1460 | .1732 | .1172 | .0731 |

The above costs of personal services do not include payroll additives for the Bureau's share of insurance, retirement, etc., which, except for the Juneau area, are recorded separately and not as a part of personal services. In fiscal years 1960 through 1962 feeding was accomplished by cortract in Juneau and the personal services costs could not be isolated. Juneau figures for FY 1963 through FY 1965 are after downward adjustment to exclude cost of living differential and payroll additives.

The number of students in attendance appears to influence the cost of personal services. The larger schools operate at a lower cost than the smaller schools as shown by the following data for 1965:

| Area | Number of Schools | Average Daily Attendance | Personal Services Cost Per Meal |
|---|---|---|---|
| Anadarko | 5 | 537 | $.0728 |
| Phoenix | 6 | 555 | .0731 |
| Muskogee | 5 | 238 | .1172 |
| Gallup | 52 | 308 | .1460 |
| Juneau | 2 | 440 | .1732 |

In the Juneau Area, the annual per capita and per meal personal services costs for 1965 were as follows:

| School | Number of Students | Annual Personal Services Cost | Per Meal |
|---|---|---|---|
| Mt. Edgecumbe | 632.1 | $160 | $.198 |
| Wrangell | 247.5 | 257 | .317 |

Exclusive of the Intermountain School, the Gallup Area has 52 boarding schools with an average daily attendance during 1965 of 308 students at each school and an average annual personal services cost of $115. Intermountain School has an average daily attendance of 1,943 students and an average annual cost of $77 per student.

We were able to develop overall cost of personal services and the ratio of employees to students for the feeding operation. The costs and ratio are shown in the following table:

| Area | FY 1965 Personal Services Cost Per Student | FY 1965 Feeding Ratio of Employees to Students |
|---|---|---|
| Juneau 1/ | $ 405 | 1 to 112.5 |
| Anadarko | 590 | 1 to 84.7 |
| Phoenix | 607 | 1 to 72.3 |
| Muskogee | 734 | 1 to 61.0 |
| Gallup 2/ | 1,070 | 1 to 43.6 |

1/ Computation based on average salaries of other areas adjusted for cost-of-living allowance.

2/ Computation based on authorized positions.

Although there is a definite correlation between the size of the schools and the per capita and per meal feeding costs, we believe that the degree of difference indicates that there are other contributing factors. We think these factors should be identified.

Day School Costs Compared to Boarding School Costs

The following table summarizes the differences between day school costs and boarding school costs when computed on a per meal basis:

| | FY 1965 Costs Per Meal | | | |
|---|---|---|---|---|
| | Personal Services | | Food | |
| | Boarding | Day | Boarding | Day |
| Gallup | $.1460 | $.8836 | $.2244 | $.4987 |
| Juneau | .2310 | .1746 | .2539 | .2803 |
| Muskogee | .1172 | .5836 | .2111 | .5436 |
| Phoenix | .0731 | .3618 | .2175 | .3290 |

Variations in the feeding policies for day schools, as previously discussed, make one-for-one comparisons difficult. However, the

per meal personal services costs for day school students are from three to six times higher for three of the four areas. The lower costs at Juneau can be attributed to use of voluntary help as cooks and shorter tours of duty for hired cooks. Focusing only on Phoenix where only one meal per day was served to day school students, the food cost per meal is substantially higher for day schools.

In our opinion, these figures reflect the fact that boarding schools are by nature more efficient than day schools. More students are fed; food waste can be controlled more easily; and a three meal per day output substantially increases the effectiveness of personal service. This should not be interpreted as a criticism of day school operations per se. But the cost differential could be an important consideration in deciding the relative advantages and disadvantages of day schools and boarding schools.

Fiscal Year Cost Variations Within the Same Area

The annual per capita feeding costs at boarding schools for 6 consecutive fiscal years for the five areas reviewed show that costs were stable for the Phoenix, Anadarko, and Gallup areas. Comments on the Juneau and Muskogee Areas follow:

1. Juneau - The Juneau Area operates two boarding schools, Mt. Edgecumbe and Wrangell. For fiscal years 1960, 1961, and 1962 feeding at Mt. Edgecumbe was accomplished by contract. The per capita costs dropped significantly when the Bureau assumed this

responsibility but the lower costs were not immediately reflected in total due to heavy initial outlays for equipment and basic food stocks. Annual per capita feeding costs at Wrangell increased from $401 in 1964 to $474 in 1965. This increase was caused by the addition of two employees. Otherwise, feeding costs at Wrangell were stable.

2. Muskogee - The feeding cost fluctuation in the Muskogee Area during 1963 and 1964 was caused by a procedural error. Three schools in the Choctaw Agency were converted from day schools to boarding schools prior to the start of the 1963 school year. The Area, however, continued to cost feeding charges as day schools because the budget was presented in that manner. We attempted to make an adjustment, but an accurate adjustment was not possible because the cost of feeding students in all day schools, including the three schools that were converted to boarding schools, was maintained in a single accounting entity.

Annual per capita feeding costs at day schools were stable in the Phoenix Area and in the Gallup Area for the United Pueblo Agency. Comments on the other areas follow:

1. Gallup-Navajo - The decrease from $307 in FY 1964 to $271 in FY 1965 was caused by coding errors on food issues. Although we made an adjustment for FY 1965, we found no basis to make any adjustments prior to FY 1965.

2. Muskogee - In our opinion the wide fluctuations in Muskogee were caused by the same accounting inconsistencies discussed above under boarding schools.

3. Juneau - The big jump in FY 1963, i.e., from $40 to $121, was caused by a change from a noonday snack to a standard menu hot meal. Otherwise, costs are stable.

The results of our review are summarized in figures 1 through 5.

Figure 1 is a line chart showing annual per capita feeding costs at boarding schools for fiscal years 1960 through 1965 by individual areas.

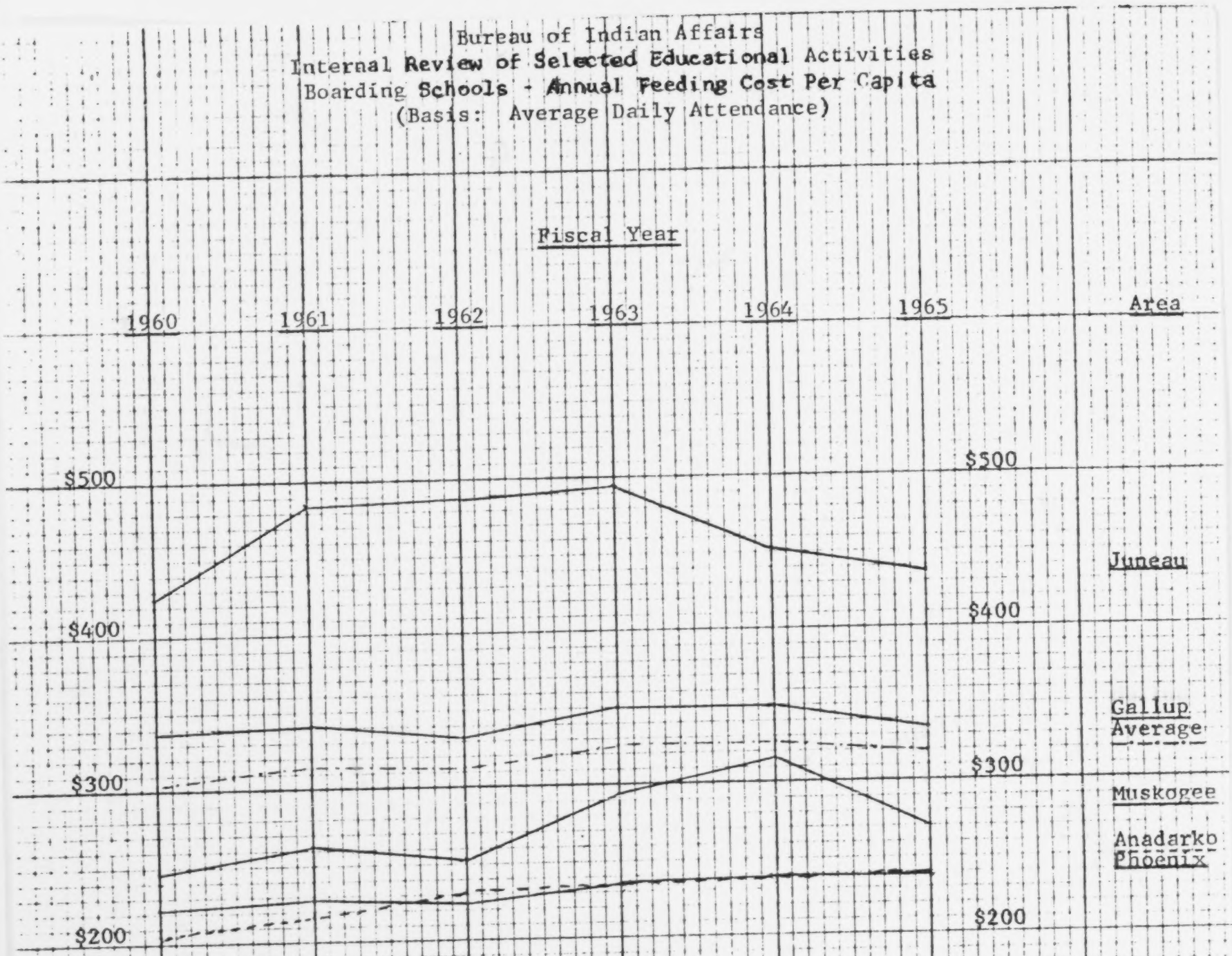
Figure 2 is a presentation of boarding school costs per meal by element of cost for each area. Data is presented for fiscal years 1960 through 1965.

Figure 3 is similar to figure 2 except that some adjustments were made to facilitate comparative analysis, e.g., costs applicable to Juneau were adjusted downward to eliminate the cost of living allowance.

Figure 4 is a line chart showing annual per capita feeding costs at day schools for fiscal years 1960 through 1965 by individual areas.

Figure 5 is a presentation of day school costs per meal by element of cost for each area. Data is presented for fiscal years 1960 through 1965.

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Boarding Schools - Annual Feeding Cost Per Capita
(Basis: Average Daily Attendance)




Note: Average based on total cost and total average daily attendance of the areas reviewed. Average daily attendance, however, does not include those day and dormitory students attending boarding schools.

Figure 2
1 of 2

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Feeding
Boarding Schools - Cost Per Meal by Elements of Cost

| DESCRIPTION | Fiscal Year 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| Anadarko 1/ | | | | | | |
| Personal Services | $0.0455 | $0.0523 | $0.0579 | $0.0655 | $0.0721 | $0.0728 |
| Food | 0.1978 | 0.2087 | 0.2174 | 0.2131 | 0.2118 | 0.2136 |
| Other | 0.0110 | 0.0082 | 0.0112 | 0.0118 | 0.0100 | 0.0094 |
| Freight | - | - | - | - | - | - |
| Cost: Per Meal | $0.2543 | $0.2692 | $0.2865 | $0.2904 | $0.2939 | $0.2958 |
| Annual | $206 | $218 | $232 | $235 | $238 | $240 |
| Gallup | | | | | | |
| Personal Services | $0.1337 | $0.1327 | $0.1315 | $0.1386 | $0.1522 | $0.1460 |
| Food | 0.2297 | 0.2366 | 0.2286 | 0.2414 | 0.2347 | 0.2244 |
| Other | 0.0076 | 0.0064 | 0.0069 | 0.0077 | 0.0079 | 0.0072 |
| Freight (including Warehouse) | 0.0460 | 0.0453 | 0.0424 | 0.0441 | 0.0374 | 0.0379 |
| Cost: Per Meal | $0.4170 | $0.4210 | $0.4094 | $0.4318 | $0.4322 | $0.4155 |
| Annual | $338 | $341 | $332 | $350 | $350 | $336 |
| Juneau | | | | | | |
| Personal Services | $0.0526 | $0.0566 | $0.0543 | $0.2167 | $0.2148 | $0.2310 |
| Food | 0.0610 | 0.0666 | 0.0708 | 0.3093 | 0.2696 | 0.2539 |
| Other | 0.0012 | 0.0023 | 0.0062 | 0.0101 | 0.0186 | 0.0134 |
| Contract | 0.4004 | 0.4619 | 0.4613 | - | - | - |
| Freight | 0.0116 | 0.0128 | 0.0114 | 0.0737 | 0.0535 | 0.0427 |
| Cost: Per Meal | $0.5268 | $0.6002 | $0.6040 | $0.6098 | $0.5565 | $0.5410 |
| Annual | $427 | $486 | $489 | $494 | $451 | $438 |

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Feeding
Boarding Schools - Cost Per Meal by Elements of Cost

| DESCRIPTION | Fiscal Year 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| Muskogee | | | | | | |
| Personal Services | $0.0850 | $0.0886 | $0.0975 | $0.1305 | $0.1376 | $0.1172 |
| Food | 0.2122 | 0.2285 | 0.2125 | 0.2239 | 0.2442 | 0.2111 |
| Other | 0.0092 | 0.0066 | 0.0039 | 0.0084 | 0.0111 | 0.0049 |
| Freight | - | - | - | - | - | - |
| Cost: Per Meal | $0.3064 | $0.3237 | $0.3139 | $0.3628 | $0.3929 | $0.3332 |
| Annual | $248 | $262 | $254 | $294 | $318 | $270 |
| Phoenix 2/ | | | | | | |
| Personal Services | $0.0565 | $0.0552 | $0.0607 | $0.0682 | $0.0678 | $0.0731 |
| Food | 0.2096 | 0.2171 | 0.2125 | 0.2152 | 0.2131 | 0.2175 |
| Other | 0.0081 | 0.0095 | 0.0060 | 0.0076 | 0.0116 | 0.0047 |
| Freight | - | - | - | - | - | - |
| Cost: Per Meal | $0.2742 | $0.2818 | $0.2792 | $0.2910 | $0.2925 | $0.2953 |
| Annual | $222 | $228 | $226 | $236 | $237 | $239 |

1/ Amounts shown include combined costs for Concho Demonstration School and all other boarding schools in the Anadarko Area although Concho Demonstration School is separate in exhibits A and B.

2/ Phoenix is the only area feeding cost reviewed that did not cost surplus food. Based on tests, the costing of surplus food would increase the cost per meal approximately one to two cents.

Figure 3
1 of 2

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Feeding
Boarding Schools - Elements of Comparable Cost

| DESCRIPTION | Fiscal Year 1963 | 1964 | 1965 | Percent of Change 1963-1965 | F.Y. 1965 Percentage Ratio to Total Cost Per Meal |
|---|---|---|---|---|---|
| **Anadarko** | | | | | |
| Personal Services | $0.0655 | $0.0721 | $0.0728 | 11.15% | 24.61% |
| Food | 0.2131 | 0.2118 | 0.2136 | 0.23 | 72.21 |
| Other | 0.0118 | 0.0100 | 0.0094 | (20.34 ) | 3.18 |
| Cost: Per Meal | $0.2904 | $0.2939 | $0.2958 | 1.86% | 100.00% |
| Annual | $235 | $238 | $240 | 2.13% | |
| **Gallup** | | | | | |
| Personal Services | $0.1386 | $0.1522 | $0.1460 | 5.34% | 38.66% |
| Food | 0.2414 | 0.2347 | 0.2244 | (7.04 ) | 59.43 |
| Other | 0.0077 | 0.0079 | 0.0072 | (6.49 ) | 1.91 |
| Cost: Per Meal | $0.3877 | $0.3948 | $0.3776 | (2.61%) | 100.00% |
| Annual | $314 | $320 | $306 | (2.55%) | |
| **Juneau** | | | | | |
| Personal Services | $0.1625 | $0.1611 | $0.1732 | 6.58% | 39.32% |
| Food | 0.3093 | 0.2696 | 0.2539 | (17.91 ) | 57.64 |
| Other | 0.0101 | 0.0186 | 0.0134 | 32.67 | 3.04 |
| Cost: Per Meal | $0.4819 | $0.4493 | $0.4405 | (8.59%) | 100.00% |
| Annual | $390 | $364 | $357 | (8.46%) | |

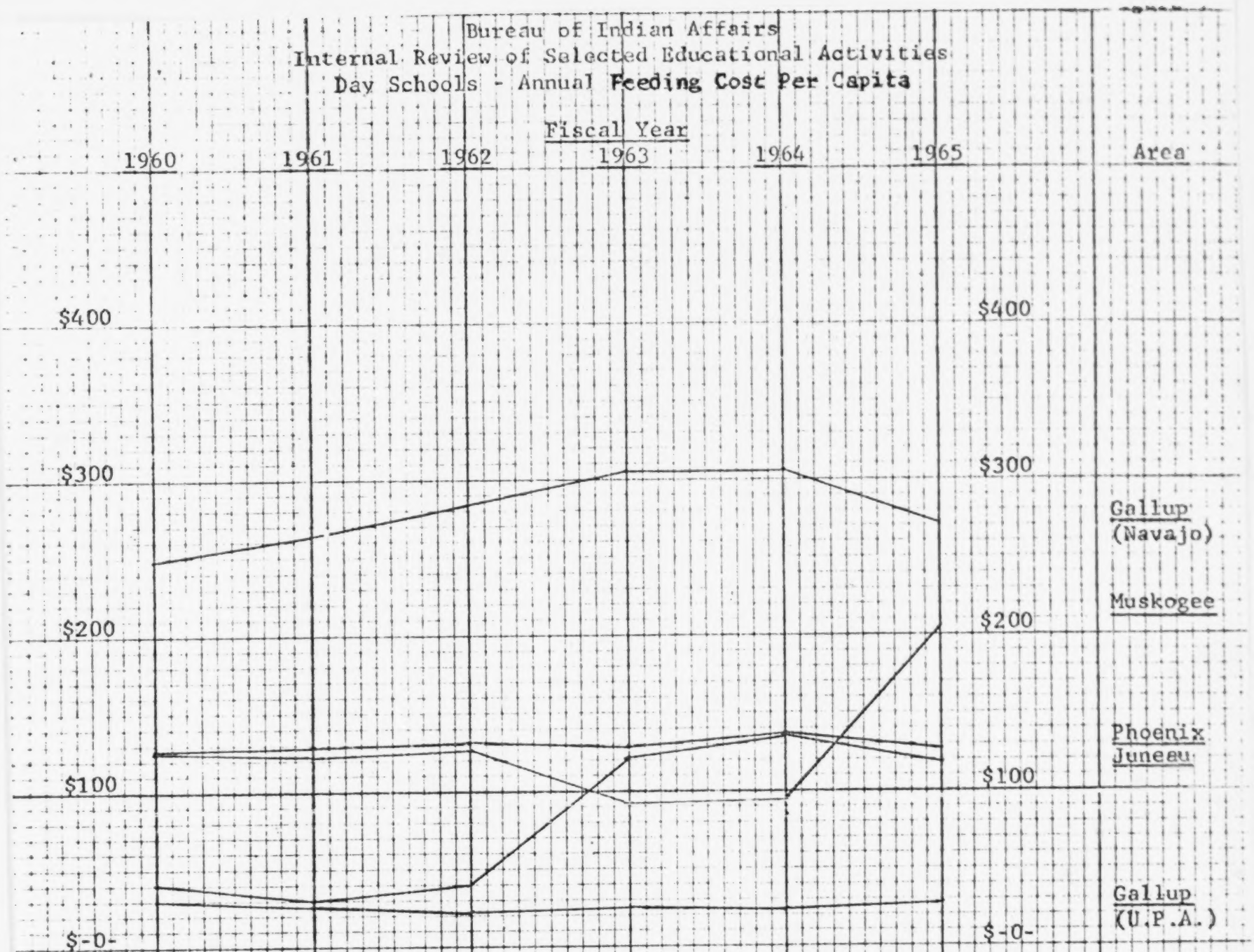
Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Feeding
Boarding Schools - Elements of Comparable Cost

| DESCRIPTION | Fiscal Year 1963 | 1964 | 1965 | Percent of Change 1963-1965 | F.Y. 1965 Percentage Ratio to Total Cost Per Meal |
|---|---|---|---|---|---|
| Muskogee | | | | | |
| Personal Services | $0.1305 | $0.1376 | $0.1172 | (10.19%) | 35.17% |
| Food | 0.2239 | 0.2442 | 0.2111 | (5.72 ) | 63.36 |
| Other | 0.0084 | 0.0111 | 0.0049 | (41.67 ) | 1.47 |
| Cost: Per Meal | $0.3628 | $0.3929 | $0.3332 | (8.16%) | 100.00% |
| Annual | $294 | $318 | $270 | (8.16%) | |
| Phoenix | | | | | |
| Personal Services | $0.0682 | $0.0678 | $0.0731 | 7.18% | 24.75% |
| Food | 0.2152 | 0.2131 | 0.2175 | 1.07 | 73.65 |
| Other | 0.0076 | 0.0116 | 0.0047 | (38.16 ) | 1.60 |
| Cost: Per Meal | $0.2910 | $0.2925 | $0.2953 | 1.48% | 100.00% |
| Annual | $236 | $237 | $239 | 1.27% | |

Notes:

1. Freight has been eliminated from Juneau.
2. Warehouse Operations (including Freight) have been eliminated from Gallup.
3. Living allowance, 25 percent of personal services, has been eliminated from Juneau.
4. 1960, 1961, and 1962 were not used as Juneau had feeding contracts in force.

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Day Schools - Annual Feeding Cost Per Capita




Key:

| | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| Gallup: | | | | | | |
| Navajo | $248 | $263 | $284 | $307 | $307 | $271 |
| U.P.A. | 30 | 27 | 22 | 25 | 24 | 28 |
| Juneau | 40 | 30 | 40 | 121 | 136 | 119 |
| Muskogee | 124 | 122 | 128 | 92 | 94 | 206 |
| Phoenix | 126 | 129 | 131 | 129 | 137 | 128 |
| Average | 86 | 84 | 90 | 128 | 138 | 125 |

Figure 5
1 of 2

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Feeding
Day Schools - Cost Per Meal by Elements of Cost

| DESCRIPTION | Fiscal Year 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| **Gallup** | | | | | | |
| Navajo: | | | | | | |
| Personal Services | $0.7221 | $0.6659 | $0.7136 | $0.7453 | $0.7314 | $0.8836 |
| Food | 0.5249 | 0.6479 | 0.7028 | 0.7846 | 0.8084 | 0.4987 |
| Other | 0.0259 | 0.0248 | 0.0316 | 0.0309 | 0.0393 | 0.0368 |
| Freight | 0.1059 | 0.1225 | 0.1307 | 0.1436 | 0.1293 | 0.0856 |
| Cost: Per Meal | $1.3788 | $1.4611 | $1.5787 | $1.7044 | $1.7084 | $1.5047 |
| Annual | $248 | $263 | $284 | $307 | $307 | $271 |
| United Pueblo Agency: | | | | | | |
| Personal Services | $0.0317 | $0.0303 | $0.0101 | - | - | $0.0164 |
| Food | 0.1159 | 0.1149 | 0.0917 | $0.1215 | $0.1239 | 0.1214 |
| Other | 0.0204 | 0.0063 | 0.0196 | 0.0166 | 0.0083 | 0.0163 |
| Freight | - | - | - | - | - | - |
| Cost: Per Meal | $0.1680 | $0.1515 | $0.1214 | $0.1381 | $0.1322 | $0.1541 |
| Annual | $30 | $27 | $22 | $25 | $24 | $28 |
| **Juneau** | | | | | | |
| Personal Services | $0.0067 | $0.0094 | $0.0604 | $0.1490 | $0.2491 | $0.1746 |
| Food | 0.1478 | 0.1044 | 0.1051 | 0.3340 | 0.2932 | 0.2803 |
| Other | 0.0088 | 0.0085 | 0.0112 | 0.0610 | 0.0788 | 0.0569 |
| Contract | - | - | - | - | - | 0.0152 |
| Freight | 0.0609 | 0.0439 | 0.0453 | 0.1279 | 0.1346 | 0.1319 |
| Cost: Per Meal | $0.2242 | $0.1662 | $0.2220 | $0.6719 | $0.7557 | $0.6589 |
| Annual | $40 | $30 | $40 | $121 | $136 | $119 |

Figure 5
2 of 2

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Feeding
Day Schools - Cost Per Meal by Elements of Cost

| DESCRIPTION | Fiscal Year 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| Muskogee | | | | | | |
| Personal Services | $0.3376 | $0.3238 | $0.3544 | $0.2250 | $0.2360 | $0.5836 |
| Food | 0.3406 | 0.3422 | 0.3499 | 0.2754 | 0.2731 | 0.5436 |
| Other | 0.0118 | 0.0101 | 0.0071 | 0.0119 | 0.0126 | 0.0149 |
| Freight | - | - | - | - | - | - |
| Cost: Per Meal | $0.6900 | $0.6761 | $0.7114 | $0.5123 | $0.5217 | $1.1421 |
| Annual | $124 | $122 | $128 | $92 | $94 | $206 |
| Phoenix | | | | | | |
| Personal Services | $0.3246 | $0.3408 | $0.3392 | $0.3642 | $0.3661 | $0.3618 |
| Food | 0.3477 | 0.3570 | 0.3674 | 0.3379 | 0.3789 | 0.3290 |
| Other | 0.0281 | 0.0208 | 0.0188 | 0.0133 | 0.0147 | 0.0212 |
| Freight | - | - | - | - | - | - |
| Cost: Per Meal | $0.7004 | $0.7186 | $0.7254 | $0.7154 | $0.7597 | $0.7120 |
| Annual | $126 | $129 | $131 | $129 | $137 | $128 |

## GUIDANCE AND DORMITORY OPERATION

In fiscal year 1965, dormitory and guidance costs totaled $10.1 million at the five area offices reviewed. The preponderance of costs cover personal services for guidance counsel at schools and dormitories and custodial services at dormitories.

The results of our review are summarized in figures 6 and 7:

Figure 6 is a line chart showing on an annual per capita basis the cost of guidance and dormitory operation by area for fiscal years 1960 through 1965.

Figure 7 is a comparative presentation of total costs; and annual per capita costs for fiscal years 1960 and 1965 by area.

In figures 6 and 7 the terms "boarding school" and "dormitories" are used. The distinction is that the term "dormitories" refers to those situations where the students attend public school; "boarding schools" refer to the joint operation of a school and a dormitory.

Guidance and dormitory costs show very close to a straight line increase from fiscal years 1960 to 1965 for each area. In aggregate for all areas, the increase in personal services and the increase in average daily attendance were:

| | 1960 | 1965 | % Increase |
|---|---|---|---|
| Personal Services | $4,492,856 | $9,086,331 | 102.2 |
| Average Daily Attendance | 18,946.5 | 26,483.0 | 39.8 |
| Annual Per Capita Costs | $237.13 | $343.10 | 44.7 |

Approximately 21.5 percent of the 44.7 increase was due to pay raises, approximately 10 percent was due to a decrease in the

employee to student ratio, and the balance can be attributed to upgrading and longevity increases.

The only unusual fluctuation of costs between fiscal years was in the Muskogee Area for fiscal years 1963, 1964, and 1965, and this was limited to other than boarding schools. Per capita costs were $415 in 1963. They increased to $552 in 1964 and dropped back to $406 in 1965. The principal reason for the fluctuation was a concurrent increase in the number of employees and decrease in the number of students in fiscal year 1964. An additional factor was some unusual outlays for equipment in fiscal year 1964. A more favorable employee to student ratio was restored in fiscal year 1965.

Although the overall trend has been very close in all areas, there has been a continuing difference in annual per capita costs between areas as shown below:

| Area | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| Anadarko | $254 | $295 | $307 | $332 | $325 | $342 |
| Gallup | 265 | 293 | 296 | 337 | 389 | 391 |
| Juneau | 332 | 397 | 394 | 428 | 446 | 476 |
| Muskogee | 262 | 301 | 323 | 364 | 409 | 426 |
| Phoenix | 245 | 269 | 267 | 285 | 301 | 320 |

The variations in annual per capita costs are directly related to variations in the ratio of employees to students.

| | Fiscal Year 1960 or 1961 | | Fiscal Year 1965 | |
|---|---|---|---|---|
| | Cost | Ratio | Cost | Ratio |
| Phoenix | $245 | 1 to 20.9 | $320 | 1 to 18.8 |
| Anadarko | 254 | 1 to 17.5 | 342 | 1 to 16.8 |
| *Juneau | 258 | 1 to 18.1 | 368 | 1 to 15.7 |
| Gallup | 265 | Not available | 391 | 1 to 15.5 |
| Muskogee | 262 | 1 to 14.9 | 426 | 1 to 13.6 |

*Adjusted to eliminate cost of living allowances.

The physical plant directs, to some degree, the number of attendants required. Bungalow-type dormitories with a small number of students require at least one night attendant for 12 to 15 students. One night attendant would be required for 40 students in a regular dormitory.

We believe that there should be a separation of guidance costs from costs of operating dormitories since they are unrelated. Guidance in the Bureau is an extension or enlargement of instruction required by the type of student being cared for by the Bureau. The costs of the guidance activity are significant in the Bureau's education program. The costs are incurred to round out the education of the students. It would appear that the costs, in addition to regular instruction cost, required to prepare the students to take their place in society should be accounted for separately so as to provide a means to evaluate the accomplishment of the objective of the program. This separation of the guidance and dormitory activities has been provided for in the proposed chart of accounts.

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Guidance and Dormitory Operation
Annual Per Capita Cost

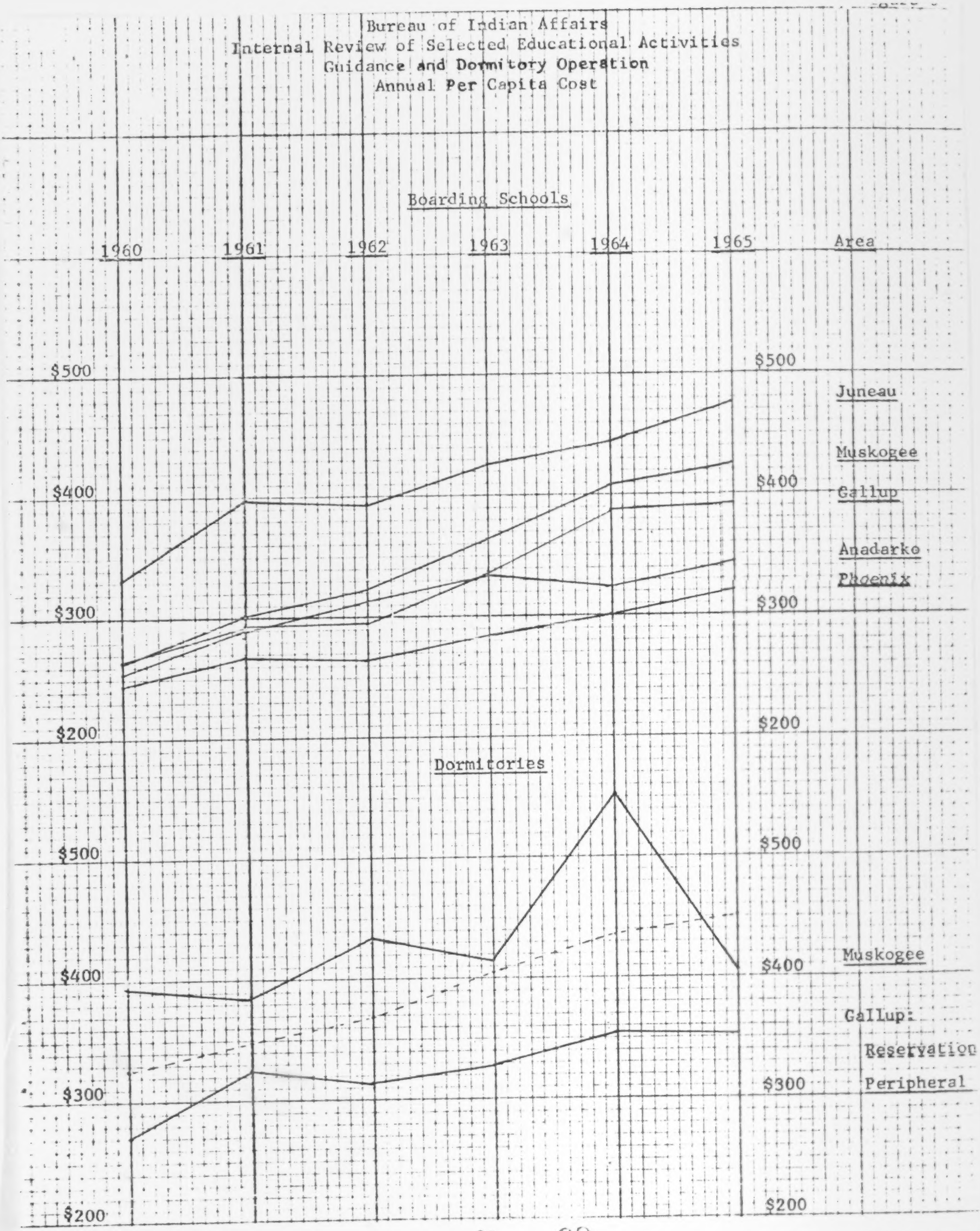


Figure 7
1 of 2

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Guidance and Dormitory Operation
Annual Per Capita Costs

| AREA AND DESCRIPTION | Cost 1960 | Cost 1965 | Per Capita Cost 1960 | Per Capita Cost 1965 | Percentage of Increase |
|---|---|---|---|---|---|
| **Anadarko** | | | | | |
| Boarding Schools: | | | | | |
| Personal Services | $529,225 | $852,334 | $218.98 | $317.31 | 44.9 |
| Other Costs | 83,514 | 66,449 | 34.56 | 24.74 | (28.4) |
| Total | $612,739 | $918,783 | $253.54 | $342.05 | 34.9 |
| **Gallup** | | | | | |
| Boarding Schools: | | | | | |
| Personal Services | $2,167,628 | $5,535,011 | $240.49 | $351.52 | 46.2 |
| Other Costs | 223,754 | 624,973 | 24.82 | 39.70 | 60.0 |
| Total | $2,391,382 | $6,159,984 | $265.31 | $391.22 | 47.9 |
| Reservation Dormitories: | | | | | |
| Personal Services | $215,725 | $284,622 | $284.52 | $360.00 | 26.5 |
| Other Costs | 31,394 | 72,141 | 41.41 | 91.26 | 120.3 |
| Total | $247,119 | $356,763 | $325.93 | $451.26 | 38.5 |
| Peripheral Dormitories: | | | | | |
| Personal Services | $492,306 | $676,803 | $242.24 | $322.08 | 33.0 |
| Other Costs | 58,111 | 62,816 | 28.59 | 29.88 | 4.5 |
| Total | $550,417 | $739,619 | $270.83 | $351.96 | 30.0 |
| Total - Area | $3,188,918 | $7,256,366 | $270.15 | $389.34 | 44.1 |
| **Juneau** | | | | | |
| Boarding Schools: | | | | | |
| Personal Services | $261,637 | $380,947 | $295.77 | $433.09 | 46.4 |
| Other Costs | 31,897 | 37,706 | 36.06 | 42.87 | 18.9 |
| Total | $293,534 | $418,653 | $331.83 | $475.96 | 43.4 |

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Guidance and Dormitory Operation
Annual Per Capita Costs

| AREA AND DESCRIPTION | Cost 1960 | Cost 1965 | Per Capita Cost 1960 | Per Capita Cost 1965 | Percentage of Increase |
|---|---|---|---|---|---|
| Muskogee | | | | | |
| Boarding Schools: | | | | | |
| Personal Services | $ 99,067 | $247,445 | $226.54 | $396.16 | 74.9 |
| Other Costs | 15,650 | 18,642 | 35.79 | 29.85 | (16.6) |
| Total | $114,717 | $266,087 | $262.33 | $426.01 | 62.4 |
| Dormitories: | | | | | |
| Personal Services | $ 92,493 | $147,043 | $280.20 | $347.04 | 23.9 |
| Other Costs | 37,243 | 25,149 | 112.82 | 59.36 | (47.4) |
| Total | $129,736 | $172,192 | $393.02 | $406.40 | 3.4 |
| Total - Area | $244,453 | $438,279 | $318.54 | $418.08 | 31.2 |
| Phoenix | | | | | |
| Boarding Schools: | | | | | |
| Personal Services | $634,775 | $ 962,126 | $206.51 | $297.75 | 44.2 |
| Other Costs | 118,080 | 72,437 | 38.41 | 22.41 | (41.7) |
| Total | $752,855 | $1,034,563 | $244.92 | $320.16 | 30.7 |

## SCHOOL BUS AND BIANNUAL TRANSPORTATION

The line chart, figure 8, shows the trend in annual per capita costs for fiscal years 1960 through 1965 by area for both boarding schools and day schools and additional data on total costs is shown in figure 9. Data is not shown for the Juneau Area because regular bus service is not provided. The occasional use of buses is not identified as an educational cost because the equipment is for general purpose use.

The available information on school bus transportation cost is not too meaningful. First of all, geographical conditions vary significantly between areas so that a comparison of annual per capita costs is substantially without meaning. Secondly, some areas have day students attending boarding schools. These costs were sometimes identified to day schools and sometimes to boarding schools. The accounting treatment is responsible for fluctuation in the Muskogee Area costs. In 1963, some day schools were converted to boarding schools but many day school students continued to attend boarding schools. The costs of transporting day school students to boarding schools were identified to boarding schools causing the annual per capita to triple.

In our opinion, costs of transporting day students to boarding schools should be separately identified but still classified with

boarding schools. This would isolate the transportation costs applicable to educational field trips, trips for medical examination, going to athletic contests, etc.

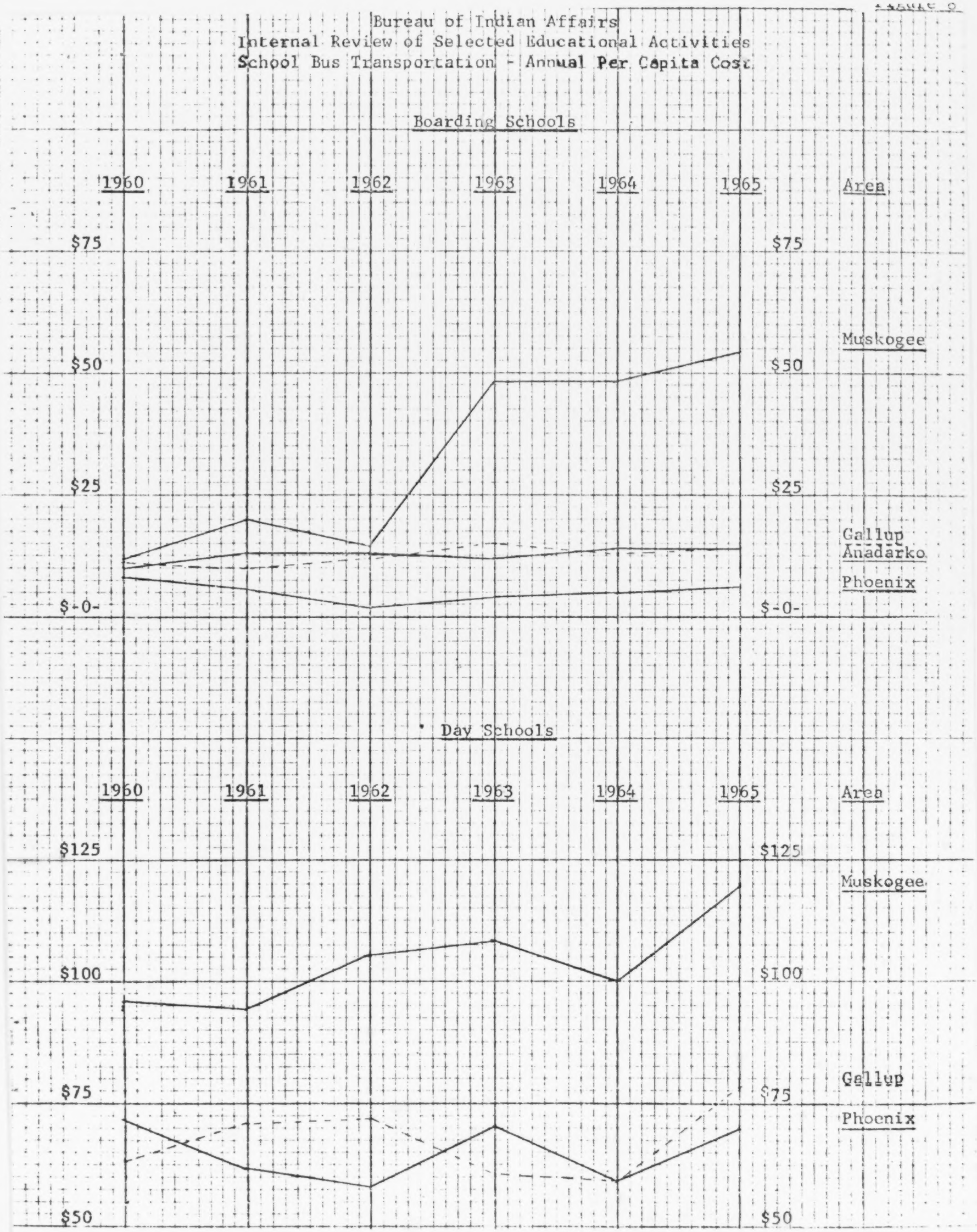
Although more accurate annual per capita costs are desirable, they will not in themselves permit an evaluation of school bus efficiency. To reach any type of conclusion, information on vehicle and personnel utilization is needed and this type of data was almost totally not available. In the Gallup Area there were twice as many buses available as there were persons designated as drivers. But in the absence of utilization information we could not reach a conclusion without materially deviating from the purpose of the audit. In this connection, reference is made to our recent audit report "Review of Motor Vehicle Use, United States Department of the Interior, May 1967."

In addition to school bus transportation, biannual transportation, i.e., the costs of student travel to and from boarding schools located off the reservation, were incurred by the Gallup and Juneau Areas. In 1965 these costs totaled $155,538 for Gallup Area students traveling off reservation and $464,486 for Juneau Area students traveling off reservation. Approximately 4,600 Gallup Area students traveled to 14 off-reservation locations at a per student cost of $34. Travel of Juneau Area students tends to be more costly, as shown below:

Fiscal Year 1965

| Area and School attended | Total Costs | Number of Students | Average Cost Per Student |
|---|---|---|---|
| **Gallup Area** | | | |
| Gallup Area | | | |
| Holbrook, Arizona | $ 812 | 74 | $11 |
| Albuquerque, New Mexico | 8,956 | 735 | 12 |
| Snowflake, Arizona | 623 | 74 | 8 |
| Richfield, Utah | 1,221 | 61 | 20 |
| Fort Wingate, New Mexico | 898 | 53 | 17 |
| Flagstaff, Arizona | 522 | 81 | 6 |
| Intermountain, Utah | 54,120 | 1,738 | 31 |
| Phoenix Area | | | |
| Stewart, Nevada | 7,410 | 118 | 63 |
| Phoenix, Arizona | 4,291 | 212 | 20 |
| Sherman, California | 20,773 | 511 | 41 |
| Anadarko Area | | | |
| Ft. Sill, Oklahoma and Riverside, Oklahoma | 14,731 | 339 | 43 |
| Chilocco, Oklahoma | 19,534 | 377 | 52 |
| Portland Area | | | |
| Chemawa, Oregon | 21,647 | 240 | 90 |
| Totals - Gallup Area | $155,538 | 4,613 | $34 |
| **Juneau Area** | | | |
| Portland Area | | | |
| Chemawa, Oregon | $174,757 | 588 | $297 |
| Anadarko Area | | | |
| Chilocco, Oklahoma and Haskell, Kansas | 45,339 | 134 | 338 |
| Juneau Area | | | |
| Mt. Edgecumbe, Alaska | 182,921 | 671 | 273 |
| Wrangell, Alaska | 61,469 | 261 | 236 |
| Totals - Juneau Area | $464,486 | 1,654 | $281 |

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
School Bus Transportation - Annual Per Capita Cost



Figure

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
School Bus Transportation

| Area and Fiscal Year | Boarding Schools: Average Daily Attendance | Boarding Schools: Cost | Boarding Schools: Annual Per Capita Cost | Day Schools: Average Daily Attendance | Day Schools: Cost | Day Schools: Annual Per Capita Cost |
|---|---|---|---|---|---|---|
| Anadarko | | | | | | |
| 1960 | 2,416.7 | $ 25,088 | $10 | | | |
| 1961 | 2,534.6 | 33,527 | 13 | (No day schools in area) | | |
| 1962 | 2,499.4 | 33,355 | 13 | | | |
| 1963 | 2,695.2 | 31,355 | 12 | | | |
| 1964 | 2,785.1 | 38,124 | 14 | | | |
| 1965 | 2,708.9 | 38,836 | 14 | | | |
| Gallup | | | | | | |
| 1960 | 9,442.9 | 106,885 | 11 | 2,313.1 | $145,821 | $ 63 |
| 1961 | 10,598.9 | 110,104 | 10 | 2,328.7 | 164,808 | 71 |
| 1962 | 11,109.6 | 136,088 | 12 | 2,230.0 | 160,582 | 72 |
| 1963 | 11,343.2 | 168,552 | 15 | 2,229.2 | 135,390 | 61 |
| 1964 | 12,785.0 | 167,688 | 13 | 2,324.3 | 139,785 | 59 |
| 1965 | 14,427.6 | 208,388 | 14 | 2,172.5 | 168,916 | 78 |
| Muskogee | | | | | | |
| 1960 | 437.3 | 6,154 | 14 | 672.8 | 64,407 | 96 |
| 1961 | 473.3 | 9,683 | 20 | 732.1 | 68,885 | 94 |
| 1962 | 472.1 | 6,422 | 14 | 713.7 | 75,755 | 106 |
| 1963 | 1,082.5 | 52,100 | 48 | 206.2 | 22,360 | 108 |
| 1964 | 1,117.0 | 53,801 | 48 | 216.0 | 21,495 | 100 |
| 1965 | 1,187.3 | 64,504 | 54 | 219.5 | 26,171 | 119 |
| Phoenix | | | | | | |
| 1960 | 3,137.9 | 25,664 | 8 | 2,381.6 | 172,382 | 72 |
| 1961 | 3,340.5 | 21,617 | 6 | 2,307.3 | 144,010 | 62 |
| 1962 | 3,300.8 | 5,821 | 2 | 2,356.0 | 136,864 | 58 |
| 1963 | 3,300.6 | 13,059 | 4 | 2,328.5 | 165,264 | 71 |
| 1964 | 3,402.5 | 16,265 | 5 | 2,266.5 | 133,214 | 59 |
| 1965 | 3,332.3 | 21,012 | 6 | 2,233.6 | 157,138 | 70 |

## PLANT OPERATIONS AND REPAIR AND MAINTENANCE

Costs of plant operations, which cover the production and distribution of utilities, are distributed to benefiting activities, e.g., education, resources management, and road construction. Repair and maintenance costs, however, have never been distributed to benefiting activities because the costs are financed by a separate Bureauwide appropriation. In fiscal year 1965, $7.3 million of plant operations cost was allocated to education in the five area offices reviewed. If repair and maintenance had been allocated, we estimated the amount would have been $5.9 million.

Figure 10 is a line chart showing by area, the plant operations costs and repair and maintenance costs expressed as a dollar amount per square foot. We were unable to complete the chart in all cases for fiscal years 1960 through 1965 because square footage figures were not available for some areas in the earlier years. We allocated repair and maintenance costs to educational activities on the same percent to total basis as plant operations costs, e.g., if plant operations applicable to educational activities computed to 80 percent of the total we allocated the same percentage of repair and maintenance costs. Figure 11 shows information on square footage on the portion applicable to education.

Comments on cost fluctuations within areas follow:

1. The increase in the cost per square foot between 1963 and 1964 in the Muskogee area is not really substantive. A three-story

building used as a storehouse was destroyed by fire which significantly reduced the square footage to be maintained. But since the building was not costing very much to maintain or operate in the first place, the results were an increase in the per square foot costs of the other facilities.

2. In the Phoenix Area, the costs per square foot for plant operations increased from $.38 in 1960 to $.53 in 1965. This increase can be directly related to salary increases and more costly materials.

With respect to variations in the costs between areas, the FY 1965 plant operations costs per square foot were as follows:

| | |
|---|---|
| Anadarko | $.245 |
| Muskogee | .378 |
| Gallup | .420 |
| Phoenix | .531 |
| Juneau | 1.261 |

Juneau costs would logically be higher because of higher salary and material costs and climatic conditions. Beyond this observation, very little can be determined as to the cause of the variances. This is because of differences in the physical characteristics of the facilities themselves.

Additional considerations related to Plant Operations an Repair and Maintenance are:

1. Methods of allocating plant operations costs tobenefiting activities were inconsistent between areas. (See discussion on page 8 and recommendation on page 14 for further details.)

2. Repair and maintenance costs should be allocated to benefiting activities for cost accounting purposes even though they are financed by a separate appropriation. (See recommendation on page 15 and discussion on page 12 for further details.)

Bureau of Indian Affairs
Internal Review of Selected Educational Activities

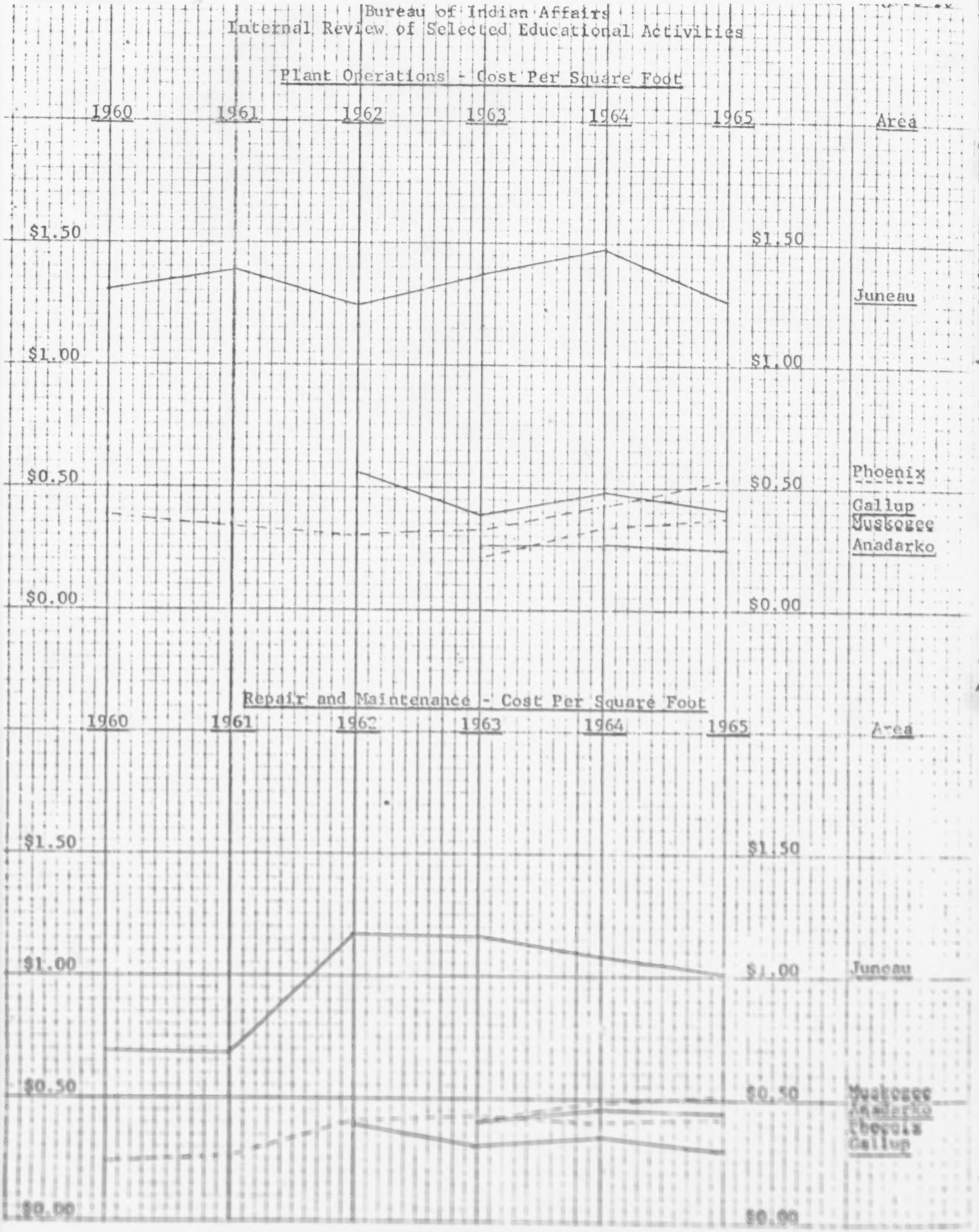


Figure 11
1 of 2

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Plant Operations and Repair and Maintenance

| Area and Fiscal Year | Total Square Feet | Annual Cost Per Square Foot: Plant Operations | Repair and Maintenance | Total | Percentage Applicable to Education |
|---|---|---|---|---|---|
| **Anadarko** | | | | | |
| 1960 | 1/ | 1/ | 1/ | 1/ | 84.54 |
| 1961 | 1/ | 1/ | 1/ | 1/ | 80.77 |
| 1962 | 1/ | 1/ | 1/ | 1/ | 85.65 |
| 1963 | 1,667,820 | $0.257 | $0.403 | $0.660 | 88.02 |
| 1964 | 1,675,029 | 0.263 | 0.456 | 0.719 | 92.91 |
| 1965 | 1,734,180 | 0.245 | 0.444 | 0.689 | 93.04 |
| **Ceiling** | | | | | |
| 1960 | 1/ | 1/ | 1/ | 1/ | 77.51 |
| 1961 | 1/ | 1/ | 1/ | 1/ | 89.70 |
| 1962 | 5,390,906 | 0.554 | 0.391 | 0.945 | 88.70 |
| 1963 | 9,120,622 | 0.390 | 0.306 | 0.696 | 89.71 |
| 1964 | 9,095,800 | 0.486 | 0.348 | 0.834 | 87.02 |
| 1965 | 11,450,800 | 0.420 | 0.287 | 0.707 | |
| **Juneau** | | | | | |
| 1960 | 836,004 | 1.308 | 0.699 | 2.007 | 79.85 |
| 1961 | 878,378 | 1.383 | 0.691 | 2.074 | 79.34 |
| 1962 | 920,752 | 1.241 | 1.172 | 2.413 | 97.92 |
| 1963 | 959,720 | 1.372 | 1.164 | 2.536 | 98.40 |
| 1964 | 1,139,688 | 1.475 | 1.081 | 2.556 | 93.28 |
| 1965 | [illegible] | [illegible] | [illegible] | [illegible] | 86.58 |
| **Muskogee** | | | | | |
| 1960 | 1/ | 1/ | 1/ | 1/ | 89.64 |
| 1961 | 1/ | 1/ | 1/ | 1/ | 87.91 |
| 1962 | 1/ | 1/ | 1/ | 1/ | 85.82 |
| 1963 | 806,472 | 0.215 | 0.403 | 0.618 | 88.51 |
| 1964 | 689,134 | 0.341 | 0.484 | 0.825 | 82.75 |
| 1965 | 666,627 | 0.378 | 0.511 | 0.889 | 83.79 |

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Plant Operations and Repair and Maintenance

Figure 11
2 of 2

| Area and Fiscal Year | Total Square Feet | Annual Cost Per Square Foot: Plant Operations | Repair and Maintenance | Total | Percentage Applicable to Education |
|---|---|---|---|---|---|
| **Phoenix** | | | | | |
| 1960 | 3,024,047 | $0.382 | $0.241 | $0.623 | 68.11 |
| 1961 | 3,026,964 | 0.349 | 0.264 | 0.613 | 69.68 |
| 1962 | 3,041,256 | 0.310 | 0.414 | 0.724 | 73.48 |
| 1963 | 3,046,430 | 0.328 | 0.437 | 0.765 | 70.02 |
| 1964 | 3,053,416 | 0.427 | 0.405 | 0.892 | 63.14 |
| 1965 | 3,057,967 | 0.531 | 0.426 | 0.957 | 59.35 |

Note:

1/ Square foot data not available.

## LAUNDRY

The line chart, figure 12, shows that the annual per capita costs for all areas except Juneau were running around $20 in FY 1965. Juneau was substantially higher at $54. Except for some minor costs of providing laundry supplies to students and except for the Juneau Area's Mt. Edgecumbe School, where laundry service was obtained through the U. S. Public Health Service for the periods reviewed, laundry services were obtained from commercial sources on a competitive bid basis.

The variables related to laundry costs are:

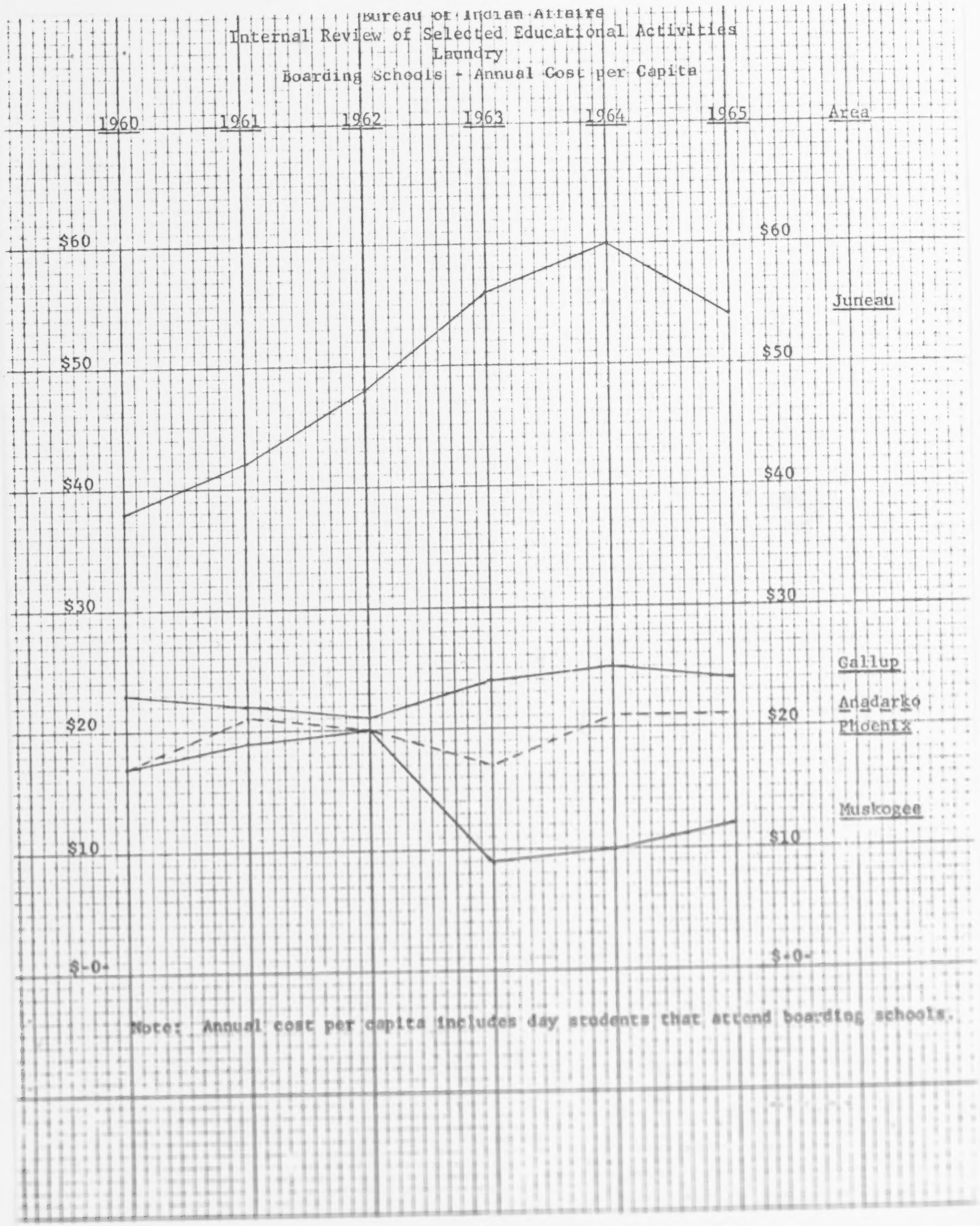
1. The price paid per pound.
2. The type of service purchased, i.e., rough dry, flat work, semifinish, and finish.
3. The amount of laundry which students do for themselves.

Sufficient information was not available to analyze laundry costs in relation to the above variables. Although it is normal to find that the Juneau Area's cost will be higher than other areas, we could reach no conclusion on the reasonableness of the variation. Similarly, we could reach no conclusion on the variation of costs within areas from one fiscal year to another.

At one time, the Bureau of Indian Affairs operated its own laundries. This operation, in addition to providing laundry service, provided

occupational training for students. Laundry costs will probably increase due to increases in minimum wages. Accordingly, it would appear advisable for the Bureau to evaluate the economics of laundry operation in accordance with BOB Circular A-76. Beginning with July 1, 1966, the Bureau assumed operation of the laundry at Mt. Edgecumbe School but cost information was not available.

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Laundry
Boarding Schools - Annual Cost per Capita




Note: Annual cost per capita includes day students that attend boarding schools.

## ASSISTANCE TO PUPILS IN NON-FEDERAL SCHOOLS

There are three types of assistance to pupils in non-Federal schools accounted for under this caption. They are:

1. Payments to states and political subdivisions for Indian pupils in grade schools by use of funds made available under the Johnson-O'Malley Act.

2. Payments to state political subdivisions for Indian pupils in grade schools by use of funds made available under the regular Bureau of Indian Affairs appropriation.

3. Grants to individual Indian students to attend advanced vocational schools or colleges.

The detail costs and annual per capita costs have been summarized and included in this report as: figures 13 and 14, Johnson O'Malley Contracts; figure 15, Other Contracts; and figure 16, Higher Education.

### Johnson-O'Malley Contracts

The line chart, figure 13, shows significant fluctuations between areas and some lesser fluctuations between fiscal years within areas. Due to nonavailability of data, we could not complete the chart in all cases but based on FY 1965 for those states or jurisdictions for which complete data was available, the range in annual per capita cost was as follows:

| | FY 1965 Annual Per Capita Costs |
|---|---|
| State of Alaska | $564 |
| Oshren Hospital, Arizona | 468 |
| Brown County, Kansas | 302 |
| Arizona | 275 |
| Jackson County, Kansas | 275 |
| State of Colorado (School Districts) | 267 |
| State of New Mexico | 146 |
| State of Oklahoma | 40 |

The wide variations in annual per capita cost reflect the different approaches used by states or other jurisdictions in computing the Federal payment. The substantive features of the principal contracts are summarized below:

1. State of Alaska - The areas in which the schools are located either do not have a local tax base, or the tax base is not adequate to support public education. The need for Johnson-O'Malley funds is determined on district and individual school financing requirements. The aid furnished ranges from full cost of operations to a small portion of operating costs after all other sources of financing have been considered. In other words, Federal contributions make up the difference between available local taxes and total requirements.

There is a transfer program in the State of Alaska. The purpose of the program is to integrate schools operated by the Bureau of Indian Affairs into the Public School System by transferring Federally-operated schools to the State or its political subdivisions as

rapidly as it is feasible to do so and as mutually acceptable agreements can be reached in regard to the amount of financial aid which can be justified.

2. State of Arizona - The aid required is by school and based on the following formula:

| | Example |
|---|---|
| Per Capita Cost | $703.27 |
| Less: | |
| Per capita receipts comprised of State and county aid, grazing and forestry receipts (but not local district per capita receipts). | (209.22) |
| P.L. 874 per capita receipts | (217.13) |
| Equals - per capita entitlement | $276.92 |
| Multiply by average daily attendance of Indian children | 1,105.028 |
| Equal Johnson-O'Malley entitlement | $306,004.35 |

To this total may be added the cost of special services and, in a few cases, additional operating costs.

3. State of Nevada - The negotiated amount of the contract is not based on number of pupils, but the funds are used for special purposes presumably required by the attendance of Indian children.

4. State of New Mexico - In the State of New Mexico, the State finances the major portion of education cost. The contract is

negotiated on the basis of impact of Indian children attending public schools. Allocation of funds by the State to districts is based on a plan formulated by the State and the Bureau and approved by the Commissioner, Bureau of Indian Affairs. In effect, the Johnson-O'Malley contributions represent the additional costs incurred by the introduction of Indian students.

5. State of Oklahoma - In the State of Oklahoma all the districts participating in State contract funds are receiving State Equalization Aid which provides them with a minimum budget. A district in order to participate must levy at least an additional five mills above the number of mills required for State Equalization Aid. This constitutes an enrichment fund above the minimum program known as Local Initiative. Johnson-O'Malley contract funds are used to supplement this Local Initiative, and a consolidated State budget is prepared in lieu of each individual district as specified in the Bureau of Indian Affairs Manual. Enrichment funds over and above the minimum program are an absolute necessity in districts receiving this type of aid from contract funds. Without Johnson-O'Malley aid these schools would have no funds for instructional supplies, library books, playground equipment and supplies, and school lunch equipment.

To summarize, annual per capita costs are highest in the State of Alaska because in many instances all operating costs are financed from

Johnson-O'Malley funds. Annual per capita costs are high in the State of Arizona because local taxes are not taken into consideration when computing the Johnson-O'Malley funds required for Indian pupils. They were lower in New Mexico and Oklahoma because (1) New Mexico assessed the incremental impact only, and (2) Oklahoma gave full consideration to all types of financing which came close to meeting total requirements.

Other Contracts

The costs of contracts under this section of the report are summarized in figure 15. The costs are incurred for Indian pupils living in peripheral dormitories and attending public schools.

Total per capita cost under the agreements with the school districts is composed of three categories of costs; namely, (1) instruction, (2) noon lunch, if applicable, and (3) parental. The latter costs are for other supplies, fees, and services not furnished by the districts to all pupils and which are paid for normally by the parent.

Instruction cost and parental cost are based on the cost for all students for the prior year. Average daily attendance and actual cost are used to compute unit cost. Payment is based on estimated enrollment for current year. School lunch cost is computed by using the estimated number of meals to be served to the dormitory students, multiplied by the cost charged other pupils for the same service.

Higher Education

Reference is made to figure 16 for the summary of cost of Higher Education.

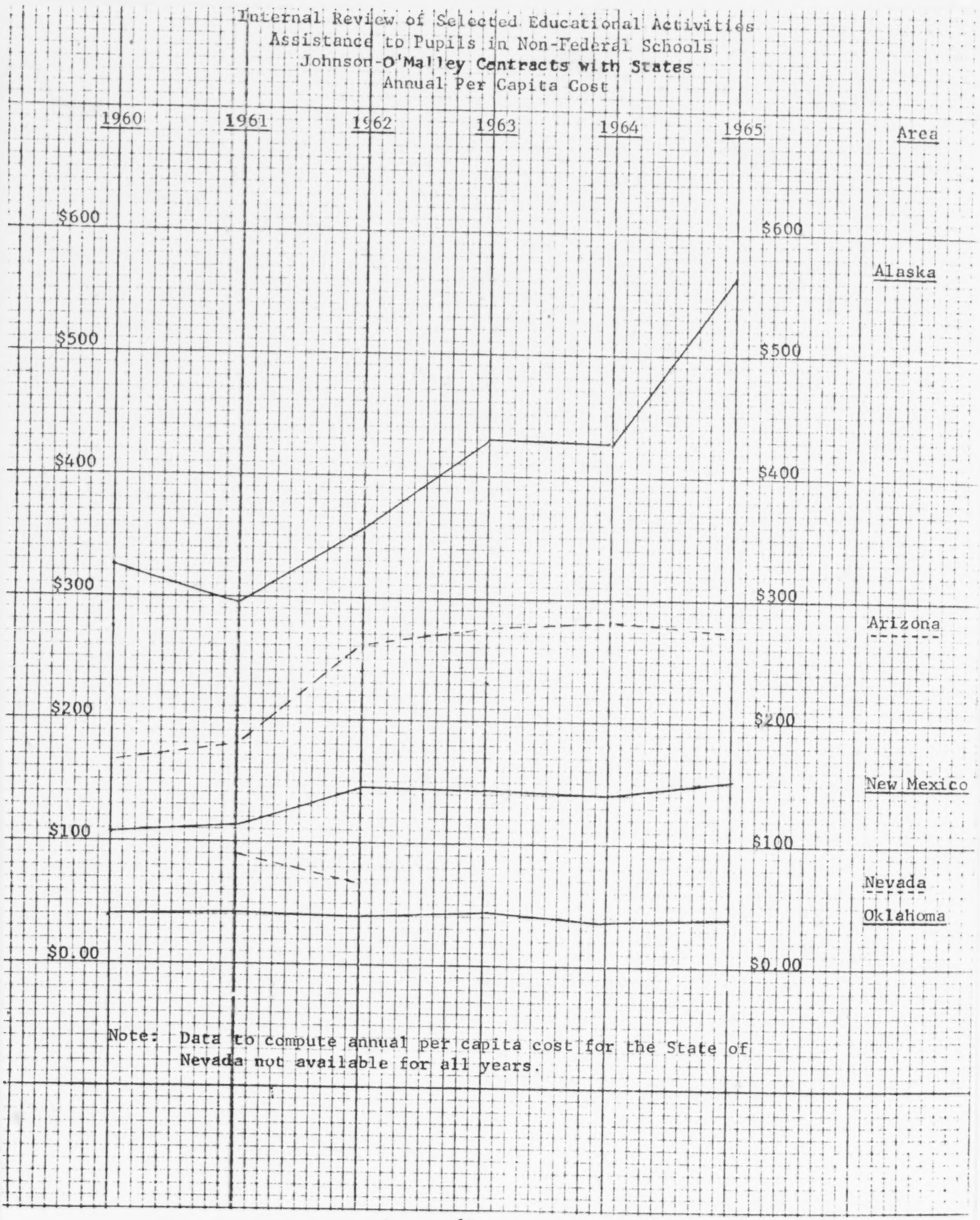
We were told that the increase in annual per capita cost resulted from the following:

1. Grants made during fiscal years 1960, 1961 and 1962 were generally limited to tuition and supplies. Many students had to work to stay in school. Problems arose due to this arrangement and the dropout rate was high. Beginning with 1963, funds were obtained to include room and board. As a consequence, the dropout rate decreased.

2. Tuition and other costs of attending college have been steadily increasing each year.

Due to lack of accounting for and standard formal reporting on type of college attended and courses taken and the elements of cost for each, it would be extremely difficult to make any comparisons or evaluations for the cost incurred per student by the various areas.

Internal Review of Selected Educational Activities
Assistance to Pupils in Non-Federal Schools
Johnson-O'Malley Contracts with States
Annual Per Capita Cost




Note: Data to compute annual per capita cost for the State of Nevada not available for all years.

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Assistance to Pupils in Non-Federal Schools
Johnson-O'Malley Contracts

Figure 14
1 of 2

| Description | Fiscal Year 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| SUMMARY OF COST | | | | | | |
| Anadarko Area | | | | | | |
| Jackson County, Kansas | $ 6,500 | $2,800 | $ 4,500 | $10,200 | $ 6,300 | $ 5,300 |
| Brown County, Kansas | 6,500 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| Total Anadarko Area | $13,000 | $8,800 | $10,500 | $16,200 | $12,300 | $11,300 |
| Gallup Area | | | | | | |
| State of New Mexico | $620,000 | $750,000 | $ 980,648 | $1,049,073 | $1,113,536 | $1,213,477 |
| School Districts, State of Colorado | 60,888 | 56,626 | 75,221 | 95,816 | 111,670 | 101,394 |
| Total Gallup Area | $680,888 | $806,626 | $1,055,869 | $1,144,889 | $1,225,206 | $1,314,871 |
| Juneau Area | | | | | | |
| State of Alaska | $539,877 | $501,252 | $587,995 | $599,441 | $599,441 | $600,016 |
| Muskogee Area | | | | | | |
| State of Oklahoma | $424,000 | $418,000 | $410,000 | $435,524 | $428,000 | $460,000 |
| Phoenix Area | | | | | | |
| State of Arizona | $1,000,000 | $1,160,902 | $1,900,000 | $2,253,000 | $2,350,680 | $2,536,000 |
| State of Nevada | 90,000 | 80,000 | 70,000 | 60,000 | 60,000 | 60,000 |
| Unitah County, Utah | 25,000 | 20,000 | 15,000 | 10,000 | 5,000 | - |
| Oshren Hospital, Arizona | - | 1,832 | 2,923 | 2,977 | 2,067 | 1,837 |
| Total Phoenix Area | $1,115,000 | $1,262,734 | $1,987,923 | $2,325,977 | $2,417,747 | $2,597,837 |
| Total | $2,772,756 | $2,997,412 | $4,052,287 | $4,522,031 | $4,682,694 | $4,984,024 |

Figure 14
2 of 2

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Assistance to Pupils in Non-Federal Schools
Johnson-O'Malley Contracts

| Description | Fiscal Year 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| ANNUAL PER CAPITA COST | | | | | | |
| State of Alaska | $328 1/ | $297 1/ | $357 1/ | $430 1/ | $429 1/ | $564 1/ |
| State of Arizona | 173 | 180 | 261 | 277 | 281 | 275 |
| State of Oklahoma | 40 | 41 | 40 | 42 | 38 | 40 |
| State of Nevada | 2/ | 90 | 68 | 2/ | 2/ | 2/ |
| State of New Mexico | 108 | 112 | 145 | 142 | 140 | 146 |
| Brown County, Kansas | 273 | 207 | 240 | 231 | 2/ | 302 |
| Jackson County, Kansas | 118 | 62 | 134 | 301 | 266 | 275 |
| Unitah County, Utah | 74 | 69 | 42 | 25 | 2/ | 2/ |
| School Districts, State of Colorado | 2/ | 2/ | 2/ | 2/ | 2/ | 267 |
| Oshren Hospital, Arizona | 2/ | 229 | 292 | 496 | 413 | 468 |

Notes:

1/ Average daily attendance data not available. Computations based on enrollment.
2/ Data not available to compute annual per capita cost based on average daily attendance.

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Assistance to Pupils in Non-Federal Schools
Other Contracts

Figure 15

| | Fiscal Year | | | | | |
|---|---|---|---|---|---|---|
| | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
| SUMMARY OF COST | | | | | | |
| Gallup Area | | | | | | |
| State of Arizona School Districts | $422,291 | $429,721 | $450,474 | $ 507,130 | $ 607,347 | $ 663,957 |
| State of New Mexico School Districts | 356,054 | 411,857 | 466,901 | 500,962 | 571,900 | 581,487 |
| State of Utah School Districts | 52,984 | 46,295 | 56,849 | 57,146 | 65,599 | 70,445 |
| Total Gallup Area | $831,329 | $887,873 | $974,224 | $1,065,238 | $1,244,846 | $1,315,889 |
| ANNUAL PER CAPITA COST | | | | | | |
| State of Arizona School Districts | $382 | $393 | $405 | $467 | $521 | $568 |
| State of New Mexico School Districts | 400 | 415 | 454 | 517 | 599 | 605 |
| State of Utah School Districts | 444 | 386 | 484 | 470 | 532 | 579 |

Figure 16

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Assistance to Pupils in Non-Federal Schools
Higher Education

| Area | Fiscal Year 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| | | | COST | | | |
| Anadarko | $ 12,351 | $ 16,966 | $ 16,271 | $ 75,618 | $127,970 | $172,271 |
| Gallup | 43,510 | 43,338 | 58,359 | 83,983 | 123,200 | 97,073 |
| Juneau | 26,673 | 31,378 | 42,592 | 73,457 | 82,879 | 94,428 |
| Muskogee | 31,660 | 29,364 | 41,364 | 88,084 | 178,264 | 294,377 |
| Phoenix | 28,793 | 22,967 | 24,442 | 50,216 | 76,948 | 142,425 |
| Total | $142,987 | $144,013 | $183,028 | $371,358 | $589,261 | $800,574 |
| | | | ANNUAL PER CAPITA COST | | | |
| Anadarko | $202 | $220 | $206 | $494 | $609 | $712 |
| Gallup | 1/ | 1/ | 1/ | 683 | 725 | 1/ |
| Juneau | 1/ | 1/ | 1/ | 1/ | 1/ | 1/ |
| Muskogee | 333 | 312 | 351 | 469 | 594 | 674 |
| Phoenix | 1/ | 1/ | 1/ | 644 | 621 | 879 |

1/ Data not available at time of review.

## SCHOOL MANAGEMENT, INSTRUCTION, AND PROGRAM DIRECTION

Costs of these programs by area office for fiscal year 1965 were:

| | School Management | Instruction | Program Direction | Total |
|---|---|---|---|---|
| Anadarko | $ 291,984 | $ 1,569,114 | $ 60,985 | $ 1,922,083 |
| Gallup | 1,680,891 | 6,534,291 | 188,295 | 8,403,477 |
| Juneau | 221,120 | 2,595,120 | 188,900 | 3,005,140 |
| Muskogee | 131,269 | 643,422 | 68,667 | 843,358 |
| Phoenix | 378,425 | 2,268,916 | 105,078 | 2,752,419 |
| | $2,703,689 | $13,610,863 | $611,925 | $16,926,477 |

The distinction between school management and program direction is that school management applies to the institutional level whereas program direction applies to the area office level. Instruction is self-explanatory.

Our review was limited to cost data and relationships between costs and numbers of students. We did inquire as to qualitative measures that might be available such as comparison of educational achievement with public schools. Each area advised that no formal system was used and that there were no formally prescribed reports.

There were only two radical fluctuations within areas between fiscal years. The sharp decrease in Muskogee Area boarding schools between fiscal years 1962 and 1963 was caused by converting day schools to boarding schools. This action more than doubled the attendance at boarding schools without a corresponding increase in costs. The most probable explanation for unusually high fiscal year 1961 day school costs in the Gallup Area is that the figures were distorted due to an accounting error. Since records were not retained, we could not make a positive determination.

Per capita cost trends pertaining to school management, instructions, and program direction show a reasonable steady increase from fiscal year 1960 through fiscal year 1965. These increases are detailed in figure 21 and increases are summarized as follows:

| Activity and Area | Annual Per Capita Cost 1960 | 1965 | Percent of Increase |
|---|---|---|---|
| **School Management** | | | |
| Anadarko | $ 73 | $108 | 47.9 |
| Gallup | 66 | 78 | 18.2 |
| Juneau | 31 | 36 | 16.1 |
| Muskogee | 63 | 72 | 14.3 |
| Phoenix | 53 | 68 | 28.3 |
| **Instructions** | | | |
| Anadarko | 436 | 579 | 32.8 |
| Gallup | 249 | 352 | 41.3 |
| Juneau | 317 | 427 | 34.7 |
| Muskogee | 409 | 457 | 11.7 |
| Phoenix | 318 | 408 | 28.3 |
| **Program Direction** | | | |
| Anadarko | 12 | 23 | 91.7 |
| Gallup | 6 | 9 | 50.0 |
| Juneau | 25 | 31 | 24.0 |
| Muskogee | 24 | 38 | 58.3 |
| Phoenix | 13 | 19 | 46.2 |

The above schedule is comprised of total annual cost for each activity divided by the total average daily attendance, except for the Gallup and Muskogee Areas. The instruction costs shown for these areas is the total annual cost, less the cost charged for dormitory student's tutoring, divided by the total average daily attendance less the attendance for dormitory students.

Additional comments on the overall increase trend are:

1. Personal services cost are approximately 87 percent of total cost of the three activities. And between fiscal years 1960 and 1965 personal services cost increased 21.5 percent due to Federal pay increases.

2. School management and program direction annual per capita costs are affected to a larger degree than instructions by a small increase (to an existing small staff) in the number of school management and program direction personnel.

3. The increase in the per capita cost for school management and program direction in the Anadarko Area was due to the opening of the Concho Demonstration School. This school is a special purpose boarding school and requires more direction, management, and instruction personnel than a regular school.

4. The annual per capita costs for the Gallup Area are based on approved positions and not actual positions filled as personnel data was not available to make this determination.

5. We believe the overall increases in annual per capita costs, in addition to legislative payroll increases, for instructions was due to upgrading of basic salaries and/or the lowering of the ratio of number of students to education employees

The primary cause of the variances in annual per capita costs, for the three subactivities commented on in this section of the report, is the varying ratio of education employees to students. This data has been summarized for fiscal year 1965 as follows:

| Area | Education Employees | Average Daily Attendance | Ratio | Annual Per Capita Costs |
|---|---|---|---|---|
| School Management | | | | |
| Juneau | 22 | 6,073.3 | 1 to 276.1 | $ 36 |
| Phoenix | 42 | 5,565.9 | 1 to 132.5 | 68 |
| Muskogee | 17 | 1,830.5 | 1 to 107.7 | 72 |
| Gallup | 206 | 21,435.1 | 1 to 104.1 | 78 |
| Anadarko | 38 | 2,708.9 | 1 to 71.3 | 108 |
| Instructions | | | | |
| Juneau | 292 | 6,073.3 | 1 to 20.8 | 427 |
| Gallup | 907 | 18,543.1 | 1 to 20.4 | 352 |
| Phoenix | 310 | 5,565.9 | 1 to 18.0 | 408 |
| Muskogee | 85 | 1,406.8 | 1 to 16.6 | 457 |
| Anadarko | 202 | 2,708.9 | 1 to 13.4 | 579 |
| Program Direction | | | | |
| Gallup | 21 | 21,435.1 | 1 to 1,020.7 | 9 |
| Phoenix | 7 | 5,565.9 | 1 to 795.1 | 19 |
| Juneau | 14 | 6,073.3 | 1 to 433.8 | 31 |
| Anadarko | 6 | 2,708.9 | 1 to 451.5 | 23 |
| Muskogee | 6 | 1,830.5 | 1 to 305.1 | 38 |

Notes:

Under Instructions, dormitory students and related costs of tutoring have been eliminated.
For Gallup, the positions are approved positions and not filled positions.
For Juneau, the annual per capita costs have not been adjusted for the cost of living (25 percent) payroll additive. The additive has been considered in the position the Juneau Area is placed in the above summary.

The Indian Affairs Manual Vol. VI, Pt. II, Chapter 4 outlines the general objectives of the Bureau's education activity. Minimum

standards have been established by the Bureau for the operation of boarding schools, boarding schools with day pupils, and dormitory schools. The areas have also established minimums for the operation of day schools.

There is a prescribed system of reporting by school on enrollment and average daily attendance, expulsions, dropouts and transfers, age-grade enrollment, and percentage of Indian blood. From this reporting, a report is published annually entitled "Statistics Concerning Indian Education." And in addition, special schools, such as the Intermountain School, Utah, have developed detailed handbooks for each subactivity; instructions, dormitory operation, etc., for their own use.

The results of our review are summarized in the following:

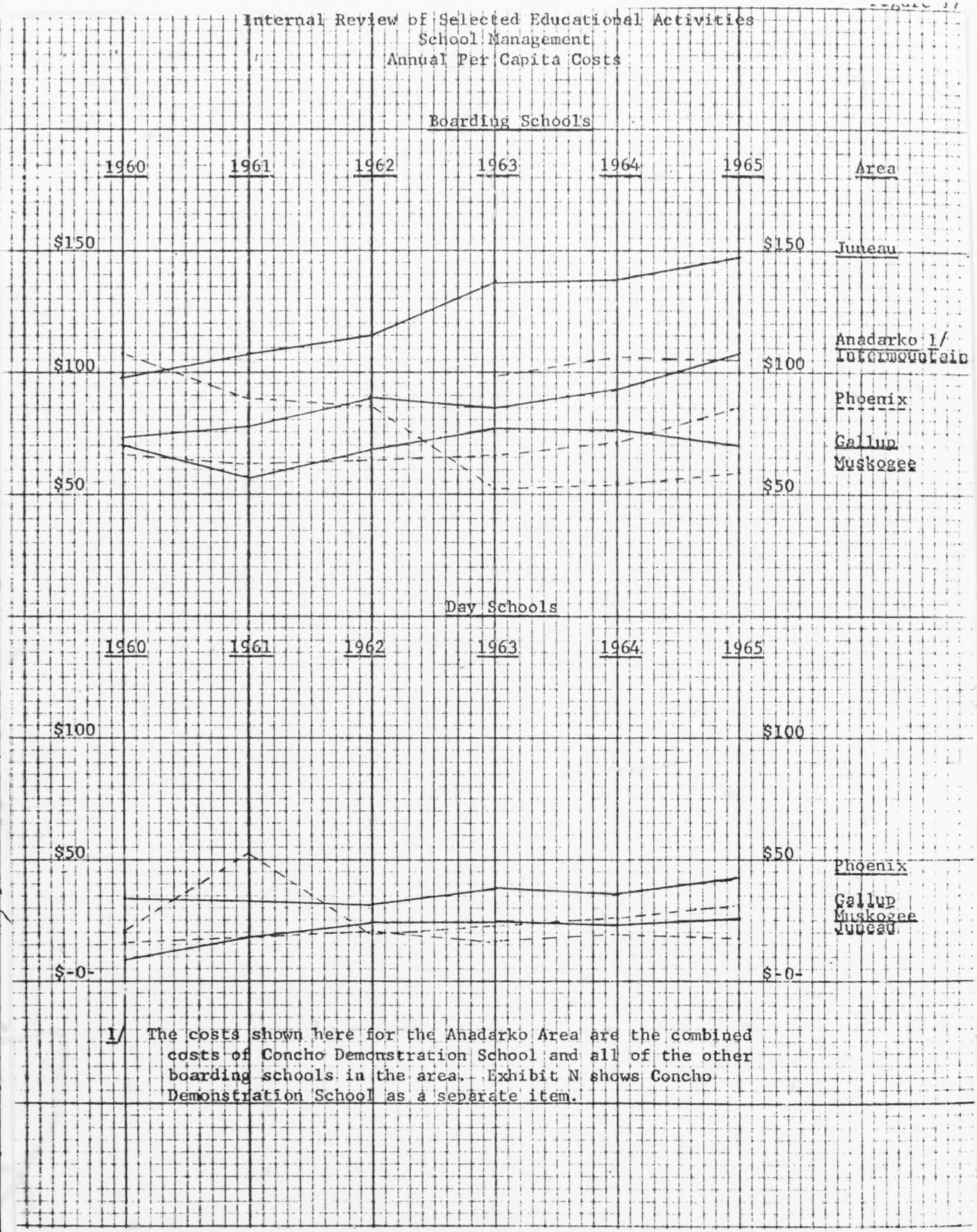
Figure 17 is a line chart showing the annual per capita costs of school management by area for fiscal years 1960 through 1965.

Figures 18 and 19 are similar to figure 17 but deal with instruction for boarding schools and day schools, respectively.

Figure 20 is also similar to figure 17 but deals with program direction.

Figure 21 is a schedule showing total annual costs and annual per capita cost by area for fiscal years 1960 and 1965.

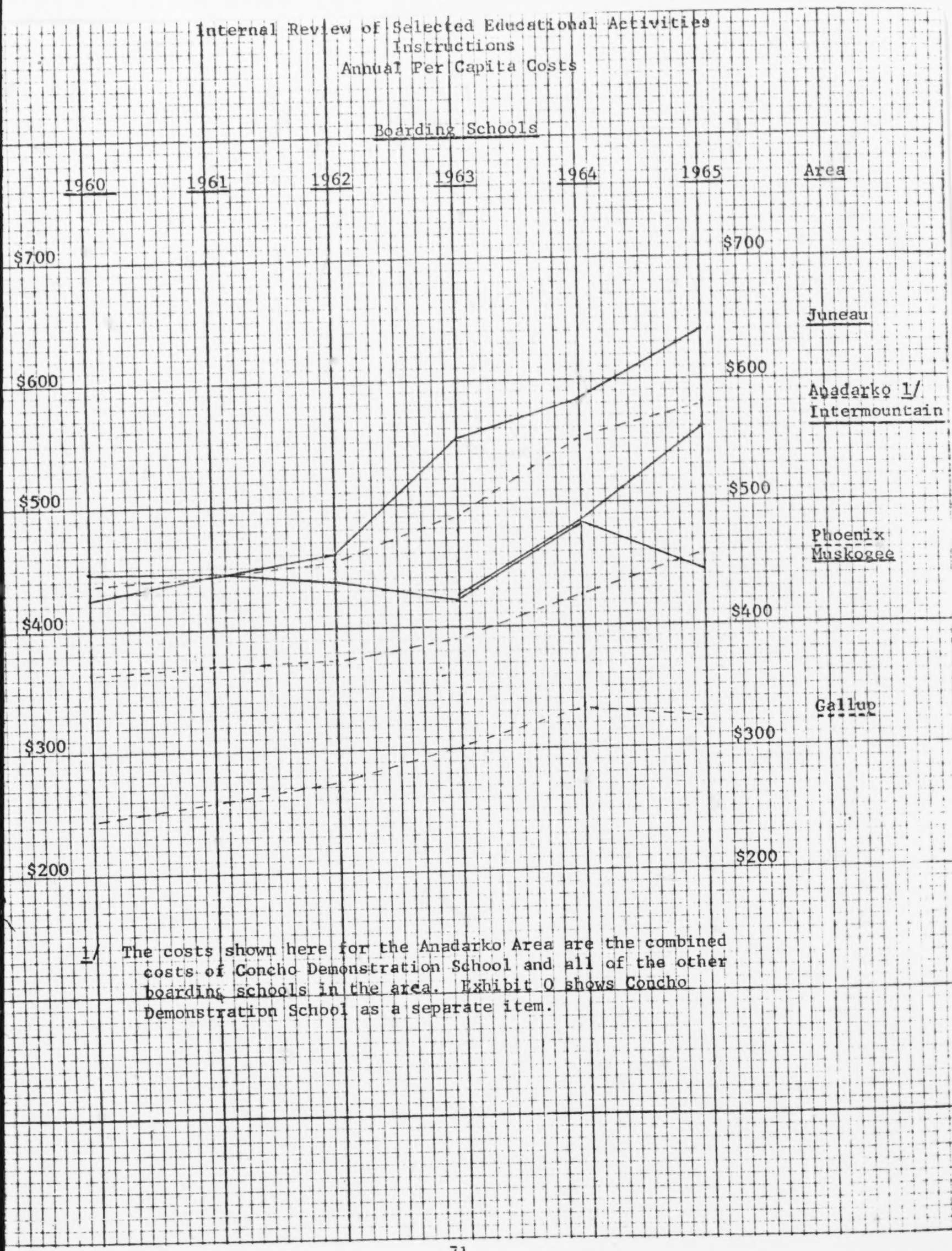
Internal Review of Selected Educational Activities
School Management
Annual Per Capita Costs




1/ The costs shown here for the Anadarko Area are the combined costs of Concho Demonstration School and all of the other boarding schools in the area. Exhibit N shows Concho Demonstration School as a separate item.

Internal Review of Selected Educational Activities
Instructions
Annual Per Capita Costs

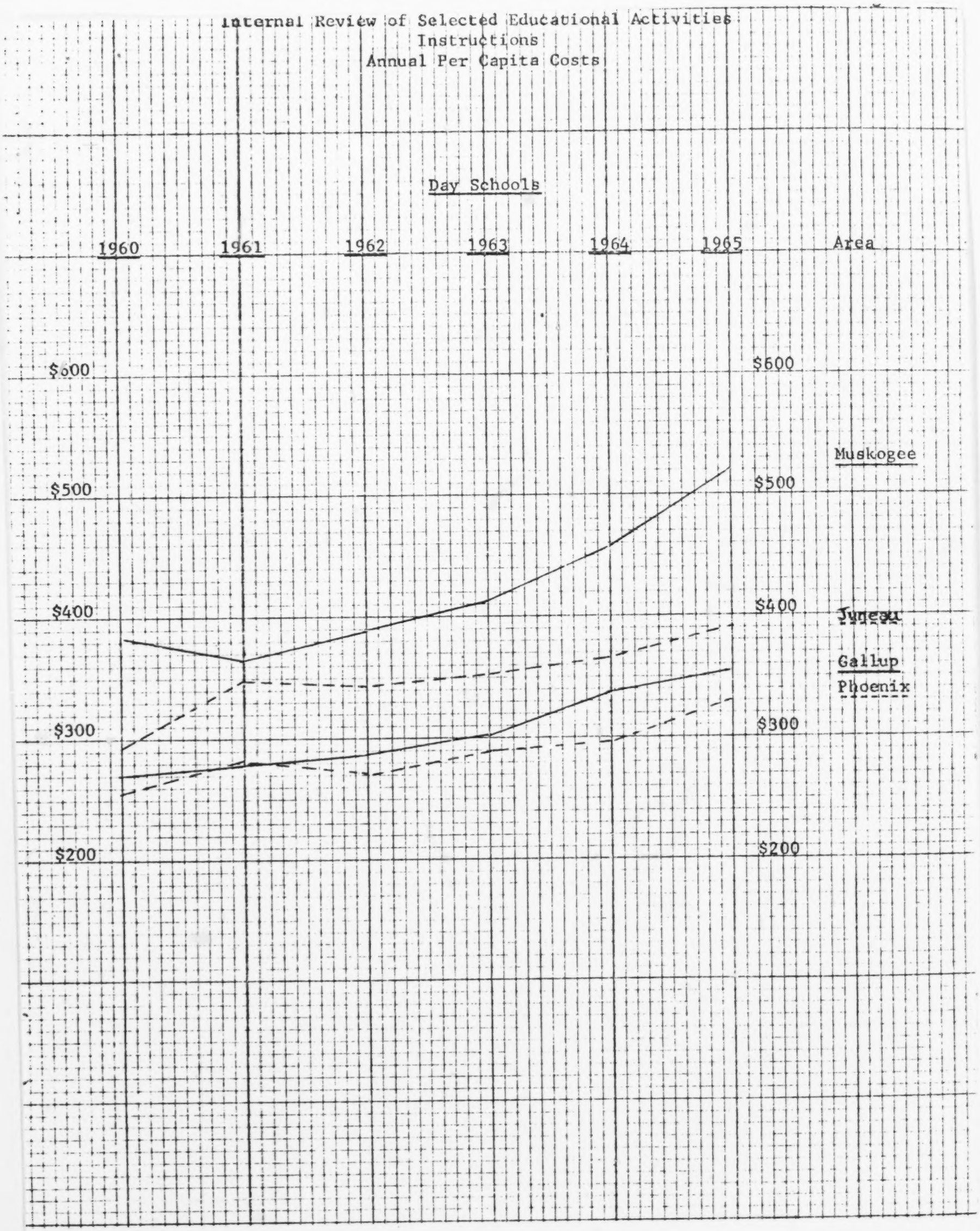
Boarding Schools




1/ The costs shown here for the Anadarko Area are the combined costs of Concho Demonstration School and all of the other boarding schools in the area. Exhibit O shows Concho Demonstration School as a separate item.

Internal Review of Selected Educational Activities
Instructions
Annual Per Capita Costs

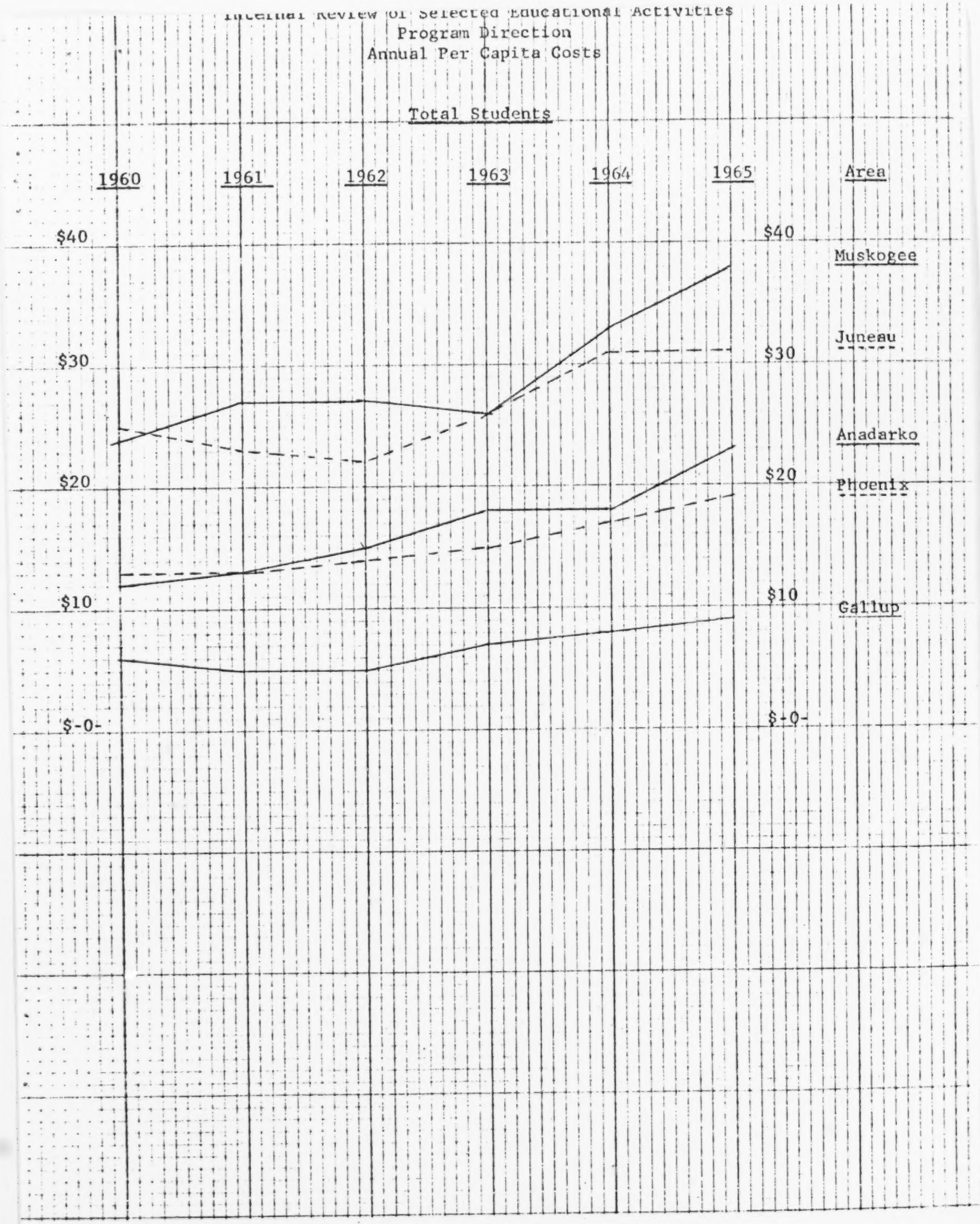
Day Schools



Internal Review of Selected Educational Activities

Program Direction

Annual Per Capita Costs



Bureau of Indian Affairs
Internal Review of Selected Educational Activities
School Management, Instructions, and Program Direction
Per Capita Cost: Computation and Comparison
For Fiscal Years 1960 and 1965



| | Area | | | | |
|---|---|---|---|---|---|
| | Anadarko | Gallup | Juneau | Muskogee | Phoenix |
| **Fiscal Year 1960** | | | | | |
| School Management: | | | | | |
| Cost | $177,250 | $966,952 | $149,015 | $90,429 | $291,335 |
| Average Daily Attendance | 2,416.7 | 14,546.5 | 4,803.2 | 1,440.2 | 5,519.5 |
| Annual Per Capita Cost | $73 | $66 | $31 | $63 | $53 |
| Instructions: | | | | | |
| Cost | $1,054,115 | $2,923,953 | $1,520,561 | $453,908 | $1,756,043 |
| Average Daily Attendance | 2,416.7 | 11,756.0 | 4,803.2 | 1,110.1 | 5,519.5 |
| Annual Per Capita Cost | $436 | $249 | $317 | $409 | $318 |
| Program Direction: | | | | | |
| Cost | $28,527 | $86,155 | $121,125 | $34,794 | $74,215 |
| Average Daily Attendance | 2,416.7 | 14,546.5 | 4,803.2 | 1,440.2 | 5,519.5 |
| Annual Per Capita Cost | $12 | $6 | $25 | $24 | $13 |
| Total Cost | $1,259,892 | $3,977,060 | $1,790,701 | $579,131 | $2,121,593 |
| Annual Per Capita Cost | $521 | $321 | $373 | $496 | $384 |
| **Fiscal Year 1965** | | | | | |
| School Management: | | | | | |
| Cost | $291,984 | $1,680,891 | $221,120 | $131,269 | $378,425 |
| Average Daily Attendance | 2,708.9 | 21,435.1 | 6,073.3 | 1,830.5 | 5,565.9 |
| Annual Per Capita Cost | $108 | $78 | $36 | $72 | $68 |
| Instructions: | | | | | |
| Cost | $1,569,114 | $6,534,291 | $2,595,120 | $643,422 | $2,268,916 |
| Average Daily Attendance | 2,708.9 | 18,543.1 | 6,073.3 | 1,406.8 | 5,565.9 |
| Annual Per Capita Cost | $579 | $352 | $427 | $457 | $408 |

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
School Management, Instructions, and Program Direction
Per Capita Cost: Computation and Comparison
For Fiscal Years 1960 and 1965

| | Area | | | | |
|---|---|---|---|---|---|
| | Anadarko | Gallup | Juneau | Muskogee | Phoenix |
| **Program Direction:** | | | | | |
| Cost | $60,985 | $188,295 | $188,900 | $68,667 | $105,078 |
| Average Daily Attendance | 2,708.9 | 21,435.1 | 6,073.3 | 1,830.5 | 5,565.9 |
| Annual Per Capita Cost | $23 | $9 | $31 | $38 | $19 |
| Total Cost | $1,922,083 | $8,403,477 | $3,005,140 | $843,358 | $2,752,419 |
| Annual Per Capita Cost | $710 | $439 | $494 | $567 | $495 |

Note:

The cost of tutoring of dormitory students and the related Average Daily Attendance have been eliminated from Instructions in the cost per capita computation for the Gallup and Muskogee Areas.

## SUMMER PROGRAMS AND ADULT EDUCATION AND TRAINING PROGRAMS

Figure 22 shows total cost for fiscal years 1960 through 1965 for both summer programs and adult education and training programs. Total cost is the only reliable information available. We were unable to draw any statistical relationships between costs and output or per capita measures because such information was not available.

Total costs of summer programs fluctuate widely from one fiscal year to another. The principal explanation for this condition is that the funding for summer programs is based on available funds after the requirements of the regular education program are accommodated. In other words, summer programs are used to achieve budgetary flexibility.

Adult education shows a consistent trend of increase in all areas. In contrast to summer programs, adult education is not used to achieve budgetary flexibility and therefore, budgeted amounts for this program are relatively firm.

Approved for Distribution:

James R. Pierce
Director, Audit Operations
Office of Survey and Review

Figure 22

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Summer Programs and Adult Education and Training Programs

| Area | Fiscal Year 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|---|---|---|---|---|---|---|
| | | | SUMMER PROGRAMS | | | |
| Anadarko | | | $56,907 | $72,067 | $165,592 | $105,944 |
| Gallup | | | 35,244 | 50,793 | 133,122 | 126,908 |
| Juneau | | $8,594 | 30,427 | 61,001 | 27,399 | 61,065 |
| Muskogee | | | 14,438 | 24,434 | 37,679 | 51,444 |
| Phoenix | | | 19,282 | 63,884 | 113,007 | 66,984 |
| | | | ADULT EDUCATION AND TRAINING PROGRAMS | | | |
| Anadarko | $14,550 | $14,930 | $ 15,749 | $ 14,938 | $ 28,602 | $ 30,145 |
| Gallup | 66,480 | 96,922 | 104,266 | 121,850 | 146,994 | 170,532 |
| Juneau | 75,071 | 57,742 | 48,377 | 69,783 | 94,744 | 96,923 |
| Muskogee | 53,039 | 45,739 | 29,068 | 27,831 | 37,029 | 55,588 |
| Phoenix | 86,449 | 47,167 | 57,229 | 107,505 | 142,563 | 148,059 |

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Suggested Chart of Accounts 1740-1769 Education Assistance, Facilities, and Services

## Area Office

1740 Program Direction

1740 Program Direction

- 1740.1 Personal Services
- 1740.2 Travel and Motor Services
- 1740.3 Freight and Drayage
- 1740.4 Facilitating Services
  - 1740.41 Administrative Services
  - 1740.42 Common Services (other than Plant Operations)
- 1740.5 Other Expenses

## By Location and Facility

1741 - 1749 Assistance to Pupils in Non-Federal Schools

1741 Johnson - O-Malley Contracts

1742 Other State and District Contracts

- 1742.1 Lunches
- 1742.2 Transportation
- 1742.3 Instruction
- 1742.4 Special Aids
- 1742.5 Other Expenses

1743 Special Aids

1744 Higher Education

- 1744.1 Full Year College Grants
  - 1744.11 Tuition
  - 1744.12 Books
  - 1744.13 Room and Board
  - 1744.14 Other Expenses
- 1744.2 Other Assistance

1750 - 1768 Federal Facilities and Services

1750 - 1759 Operation of Schools

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Suggested Chart of Accounts 1740-1769 Education Assistance, Facilities, and Services

1751 School Management

- 1751.1 Personal Services
- 1751.2 Travel and Motor Services
- 1751.3 Communications
- 1751.4 Freight and Drayage
- 1751.5 Other Expenses

1752 Instructions

- 1752.1 Personal Services
- 1752.2 Travel and Motor Services
- 1752.3 Textbooks
- 1752.4 Teaching Supplies
- 1752.5 Library Services
  - 1752.51 Library Books
  - 1752.52 Supplies and Materials
- 1752.6 Furniture and Equipment (noncapitalized)
- 1752.7 Freight and Drayage
- 1752.8 Athletic Equipment
  - 1752.81 Intramural
  - 1752.82 Other
- 1752.9 Other Expenses

1753 Feeding

- 1753.1 Dining Room Operation
  - 1753.11 Personal Services
  - 1753.12 Food
    - 1753.121 Direct Purchases and Stores Issues
    - 1753.122 Non-Funded Costs
    - 1753.123 Credits (milk, etc.)
    - 1753.124 Indian Money Proceeds of Labor
    - 1753.125 Reimbursable from Others
    - 1753.126 Sale of Meals
  - 1753.13 Freight and Drayage
  - 1753.14 Travel and Motor Services
  - 1753.15 Warehouse Operations
    - 1753.151 Personal Services
    - 1753.152 Travel and Motor Services
    - 1753.153 Other Expenses
  - 1753.16 Food Administration
    - 1753.161 Personal Services
    - 1753.162 Travel and Motor Services
    - 1753.163 Other Expenses

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Suggested Chart of Accounts 1740-1769 Education Assistance, Facilities, and Services

1753.17 Furniture and Equipment (noncapitalized)
1753.18 Other Expenses

1754 Laundry

1754.1 Laundry Operation
1754.11 Personal Services
1754.12 Freight and Drayage
1754.13 Travel and Motor Services
1754.14 Materials and Supplies
1754.15 Furniture and Equipment (noncapitalized)
1754.16 Other Expenses

1754.2 Contract Laundry Services

1755 Guidance

1755.1 Personal Services
1755.2 Travel and Motor Services
1755.3 Recreational Materials
1755.4 Clothing and Personal Effects
1755.5 Furniture and Equipment (noncapitalized)
1755.6 Freight and Drayage
1755.7 Other Expenses

1756 Dormitory Operation

1756.1 Personal Services
1756.2 Travel and Motor Services
1756.3 Materials and Supplies
1756.4 Furniture and Equipment (noncapitalized)
1756.5 Freight and Drayage
1756.6 Other Expenses

1757 Buildings and Structures

1757.1 Commca Services
1757.2 Repair and Maintenance
1757.3 Furniture and Equipment (noncapitalized)
1757.4 Other Expenses

(Note: Detail of Accounts 1757.1 and 1757.2 will be maintained under Resources Management, Account 1757.1 by types of expenditure and Account 1757.2 on a "Work Order" basis. Provision should also be made to accumulate cost of Personal Services, Travel and Motor Services and other pertinent data.)

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Suggested Chart of Accounts 1740-1769 Education Assistance,
Facilities, and Services

1758 Transportation of Students

1758.1 School Bus Transportation
1758.11 Personal Services
1758.12 Materials
1758.13 GSA Rentals
1758.14 Freight and Drayage
1758.15 Furniture and Equipment (noncapitalized)
1758.16 Other Expenses

1758.2 Contract Transportation
1758.3 Biannual Transportation
1758.31 Carrier Costs
1758.32 Other Expenses

1760 - 1769 Special Services

1760 Summer Programs

1760.1 Personal Services
1760.2 Employees Travel and Motor Services
1760.3 Student Travel and Motor Services
1760.4 Food
1760.5 Supplies and Materials
1760.51 Recreational
1760.52 Other
1760.6 Other Expenses

1761 In-Service Training

1761.1 Personal Services
1761.2 Travel and Motor Services
1761.3 Other Expenses

1762 Museums

1762.1 Personal Services
1762.2 Travel and Motor Services
1762.3 Other Expenses

Bureau of Indian Affairs
Internal Review of Selected Educational Activities
Suggested Chart of Accounts 1740-1769 Education Assistance,
Facilities, and Services

1763 Adult Education Training

1763.1 Adult Education
- 1763.11 Personal Services
- 1763.12 Employee Travel and Motor Services
- 1763.13 Student Travel and Motor Services
- 1763.14 Financial Assistance to Students (In addition to travel)
- 1763.15 Contract Payments
- 1763.16 Other Expenses

1763.2 Preparation and Training - Readjustment
- 1763.21 Personal Services
- 1763.22 Employee Travel and Motor Services
- 1763.23 Student Travel and Motor Services
- 1763.24 Financial Assistance to Students (In addition to travel)
- 1763.25 Contract Payments
- 1763.26 Tuition Payments
- 1763.27 Other Expenses

## INDEX OF EXHIBITS
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| | Exhibit |
|---|---|
| **FEEDING** | |
| Exhibit A Comparative Schedule of Feeding Costs by Type of School | |
| Anadarko Area | A-1 |
| Gallup Area | A-2 |
| Juneau Area | A-3 |
| Muskogee Area | A-4 |
| Phoenix Area | A-5 |
| Exhibit B Schedule of Variances in Feeding Costs Based on Average Daily Attendance and Enrollment | |
| Anadarko Area | B-1 |
| Gallup Area | B-2 |
| Juneau Area | B-3 |
| Muskogee Area | B-4 |
| Phoenix Area | B-5 |
| Exhibit C Schedule of Selected Food Item Price Range | |
| Anadarko and Muskogee Areas | C-1 |
| Gallup Area | C-2 |
| Juneau Area | C-3 |
| Phoenix Area | C-4 |
| **GUIDANCE AND DORMITORY OPERATIONS** | |
| Exhibit D Comparative Schedule of Guidance and Dormitory Operations Recorded Costs and Related Statistics | |
| Anadarko Area | D-1 |
| Gallup Area | D-2 |
| Juneau Area | D-3 |
| Muskogee Area | D-4 |
| Phoenix Area | D-5 |
| Exhibit E Comparative Schedule of Guidance and Dormitory Operations Recorded Costs and Related Statistics (Summary of Percentage Changes) | |
| Anadarko Area | E-1 |
| Gallup Area | E-2 |
| Juneau Area | E-3 |
| Muskogee Area | E-4 |
| Phoenix Area | E-5 |

## INDEX OF EXHIBITS
## INCLUDED IN PART II OF THIS REPORT


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|---|---|
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| Gallup Area | F-2 |
| Juneau Area | F-3 |
| Muskogee Area | F-4 |
| Phoenix Area | F-5 |
| Exhibit G Unit Costs of School Bus Transportation | |
| Anadarko Area | G-1 |
| Gallup Area | G-2 |
| Muskogee Area | G-3 |
| Phoenix Area | G-4 |
| Exhibit H Schedule of Students Transported to Schools and Related Costs of Biannual Transportation | |
| Gallup Area | H-1 |
| Juneau Area | H-2 |
| **PLANT OPERATIONS** | |
| Exhibit I Comparative Schedule of Costs | |
| Anadarko Area | I-1 |
| Gallup Area | I-2 |
| Juneau Area | I-3 |
| Muskogee Area | I-4 |
| Phoenix Area | I-5 |
| **OTHER FACILITATING SERVICES** | |
| Exhibit J Comparative Schedule of Costs | |
| Gallup Area | J-1 |
| Juneau Area | J-2 |
| Muskogee Area | J-3 |
| Phoenix Area | J-4 |
| **LAUNDRY** | |
| Exhibit K Comparative Schedule of Laundry Recorded Costs and Related Statistics | |
| Anadarko Area | K-1 |
| Gallup Area | K-2 |
| Juneau Area | K-3 |
| Muskogee Area | K-4 |
| Phoenix Area | K-5 |

## INDEX OF EXHIBITS
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| | Exhibit |
|---|---|
| Exhibit L Comparative Schedule of Laundry Price Per Pound | |
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| Gallup Area | L-2 |
| Juneau Area | L-3 |
| Muskogee Area | L-4 |
| Phoenix Area | L-5 |
| ASSISTANCE TO PUPILS IN NON-FEDERAL SCHOOLS | |
| Exhibit M Comparative Schedule of Costs | |
| Anadarko Area | M-1 |
| Gallup Area | M-2 |
| Juneau Area | M-3 |
| Muskogee Area | M-4 |
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| SCHOOL MANAGEMENT, INSTRUCTION AND PROGRAM DIRECTION | |
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